

1/33

FIG. 1A

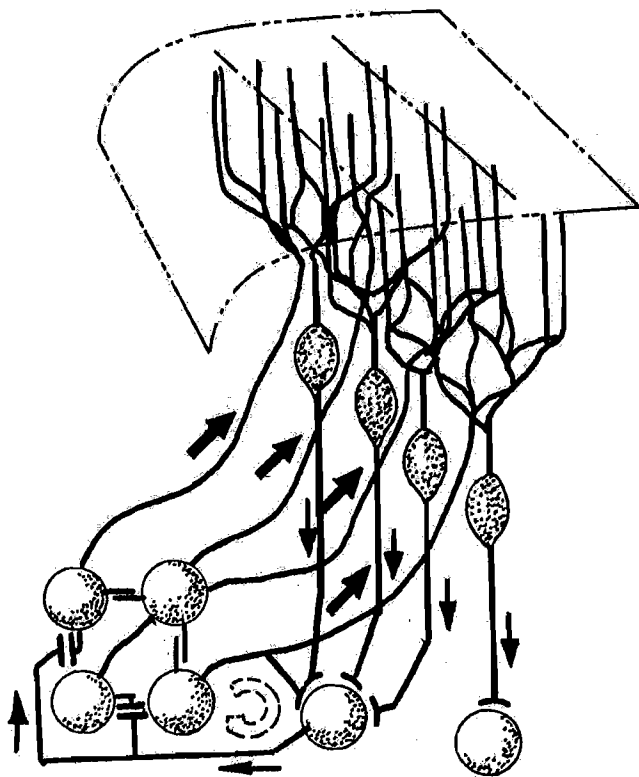
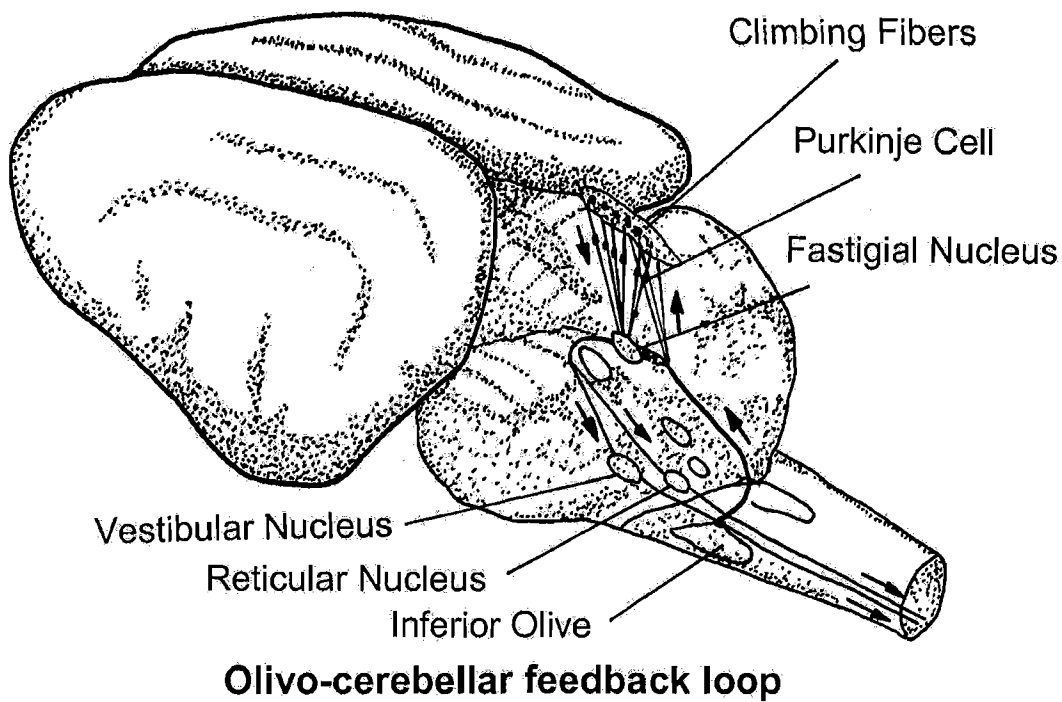


FIG. 1B

Functional circuit

2/33

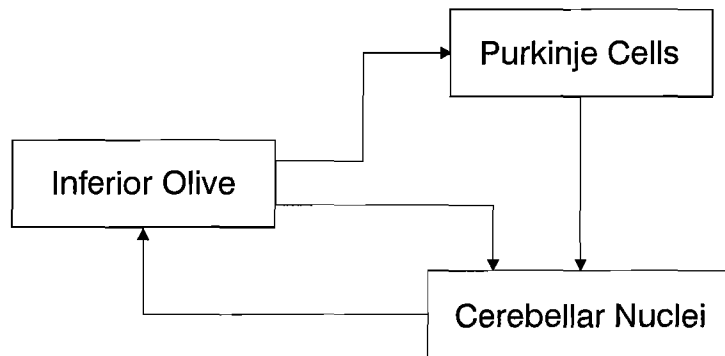
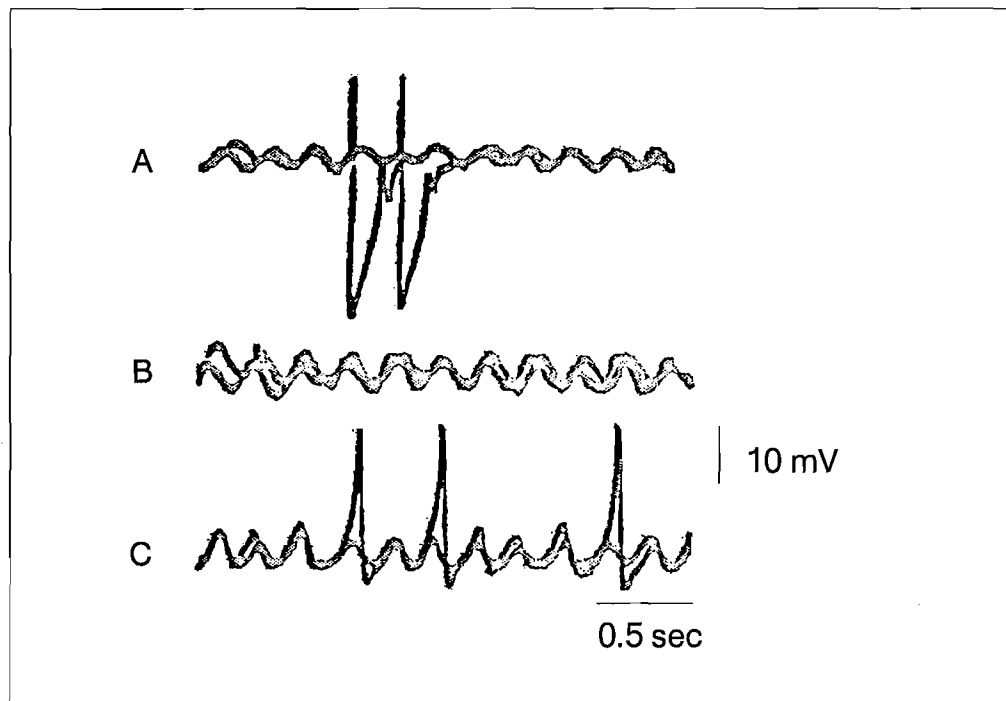


FIG. 1C



**ELECTROPHYSIOLOGY OF NEURONES
IN OSCILLATION AND RESONANCE 9**

FIG. 2

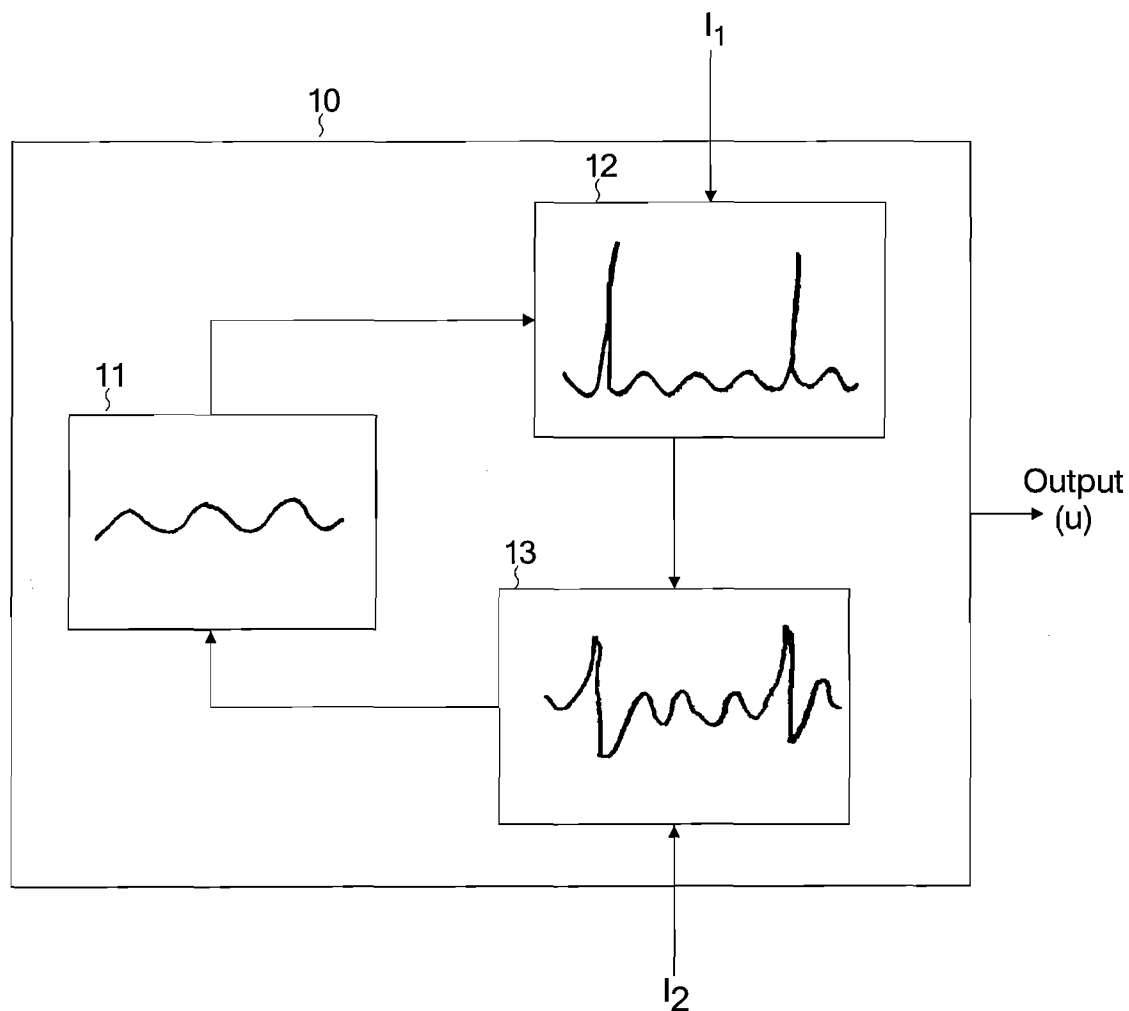


FIG. 3

4/33

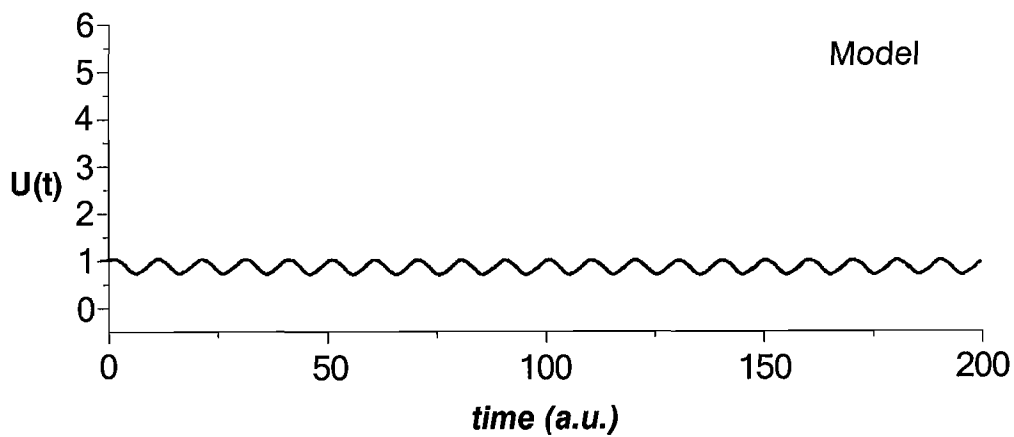


FIG. 4A

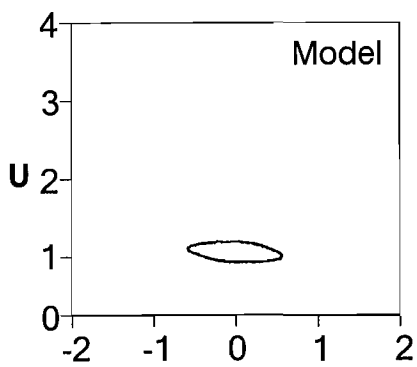


FIG. 4B

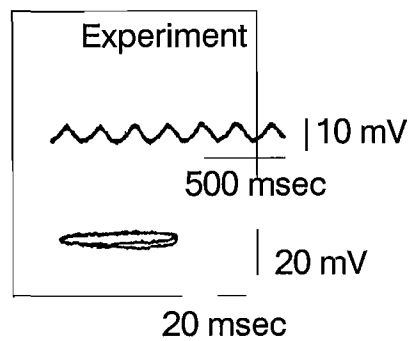


FIG. 4C

5/33

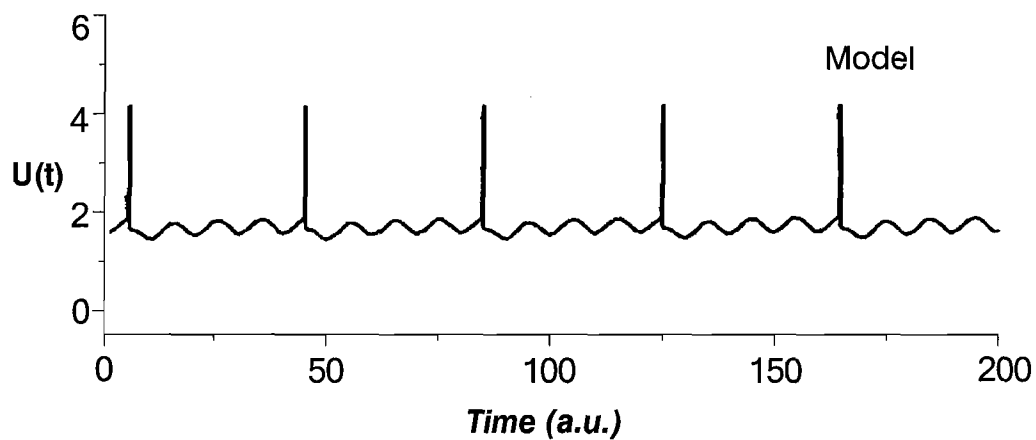


FIG. 5A

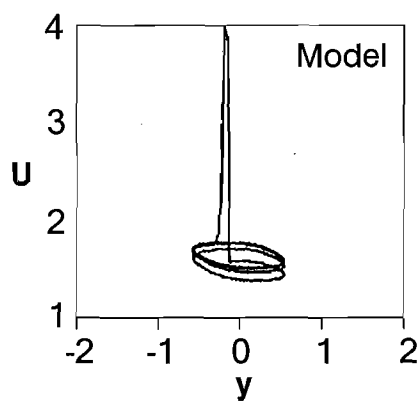


FIG. 5B

6/33

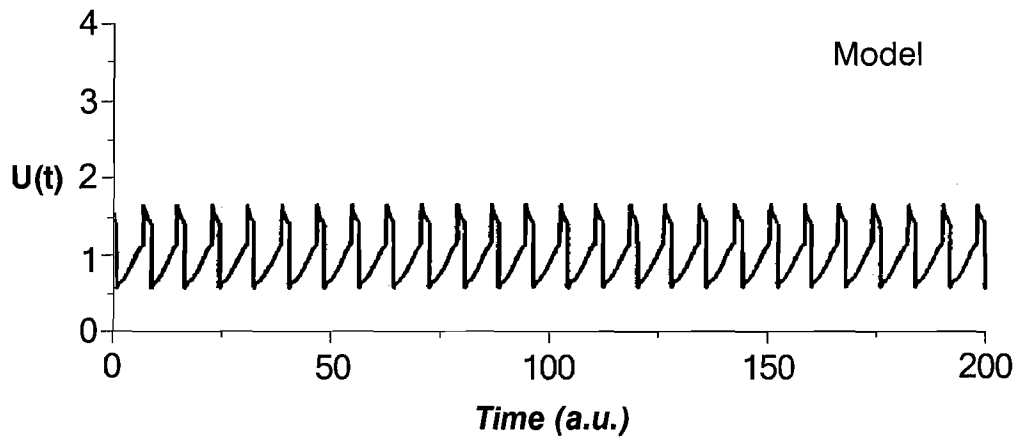


FIG. 6A

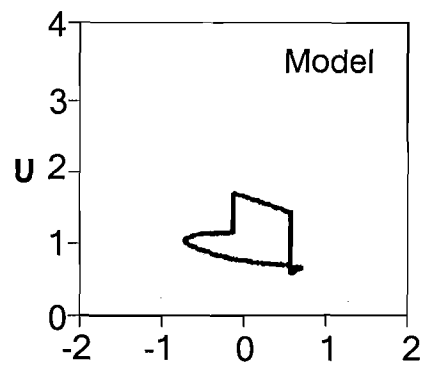


FIG. 6B

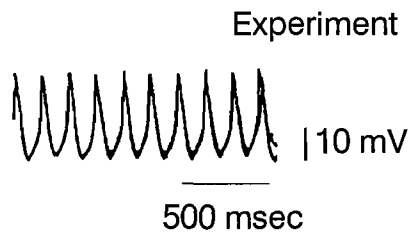


FIG. 6C

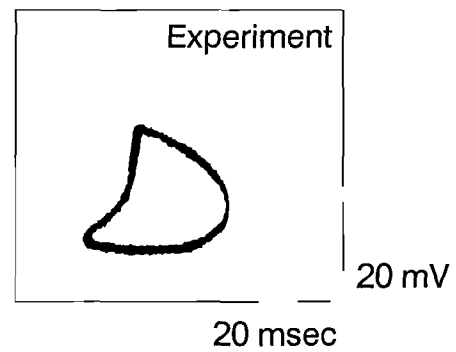


FIG. 6D

7/33

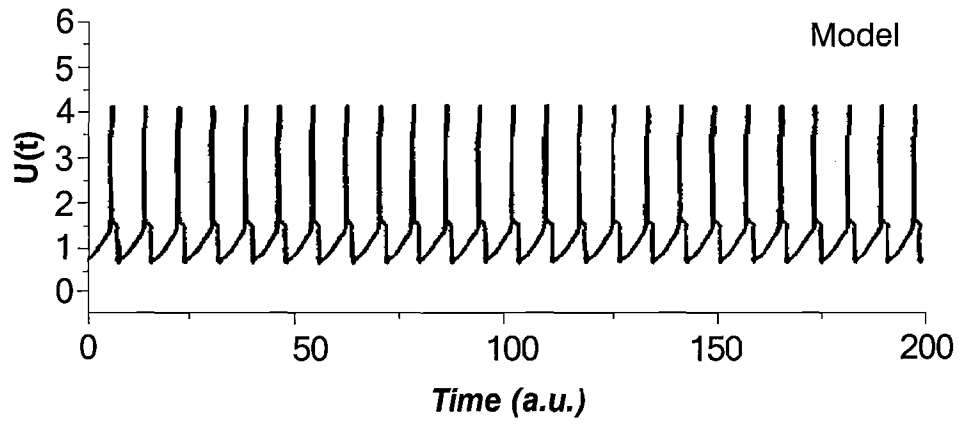


FIG. 7(a)

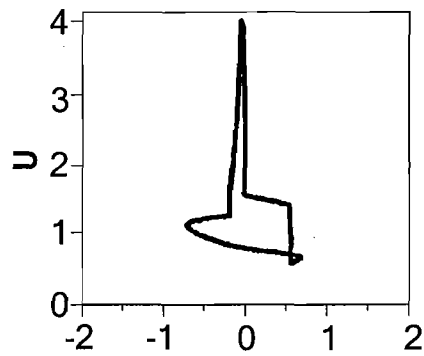


FIG. 7B

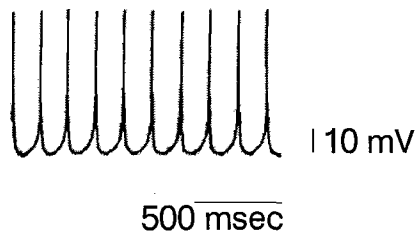


FIG. 7C

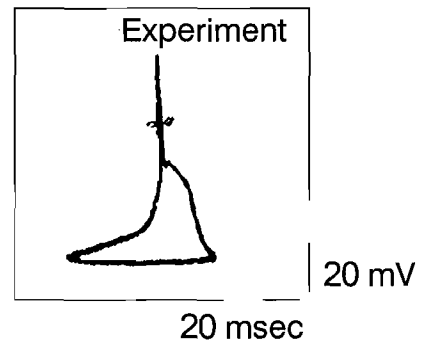


FIG. 7D

8/33

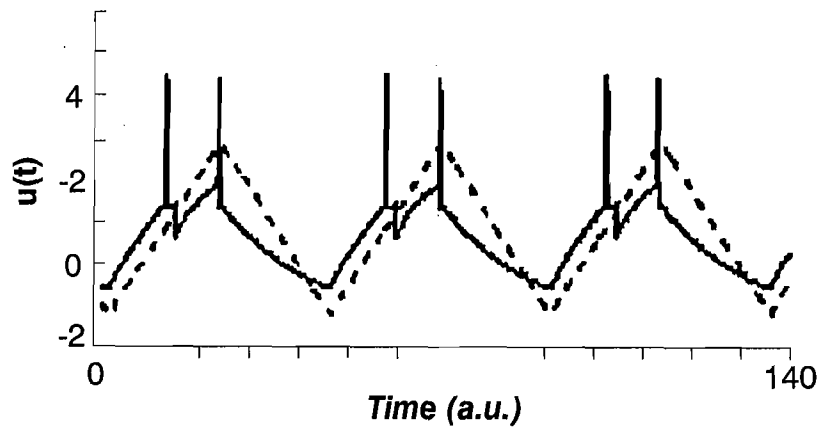


FIG. 8A

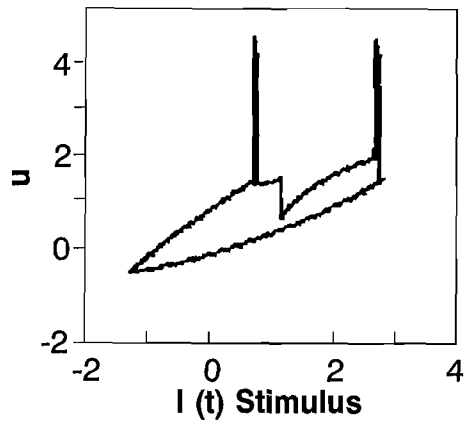


FIG. 8B

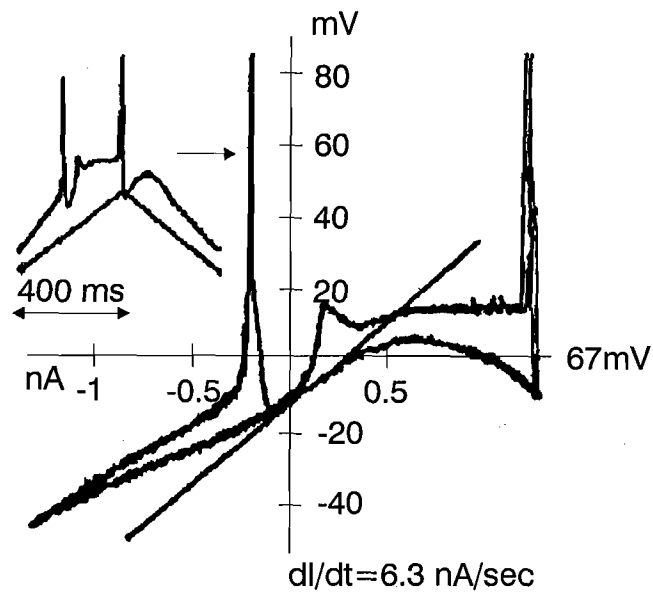


FIG. 8C

9/33

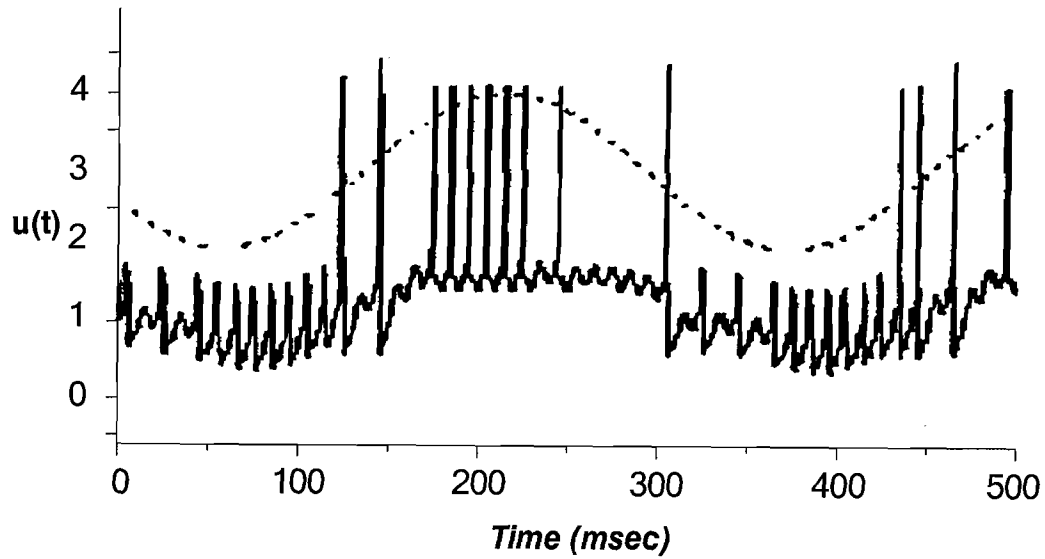


FIG. 8D

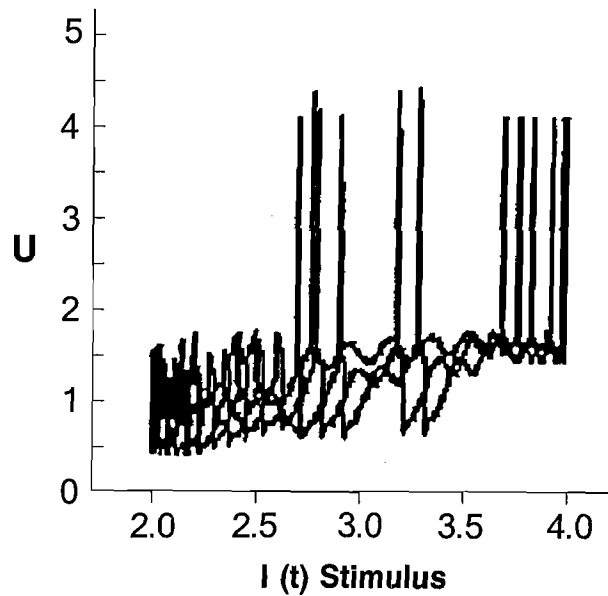


FIG. 8E

10/33

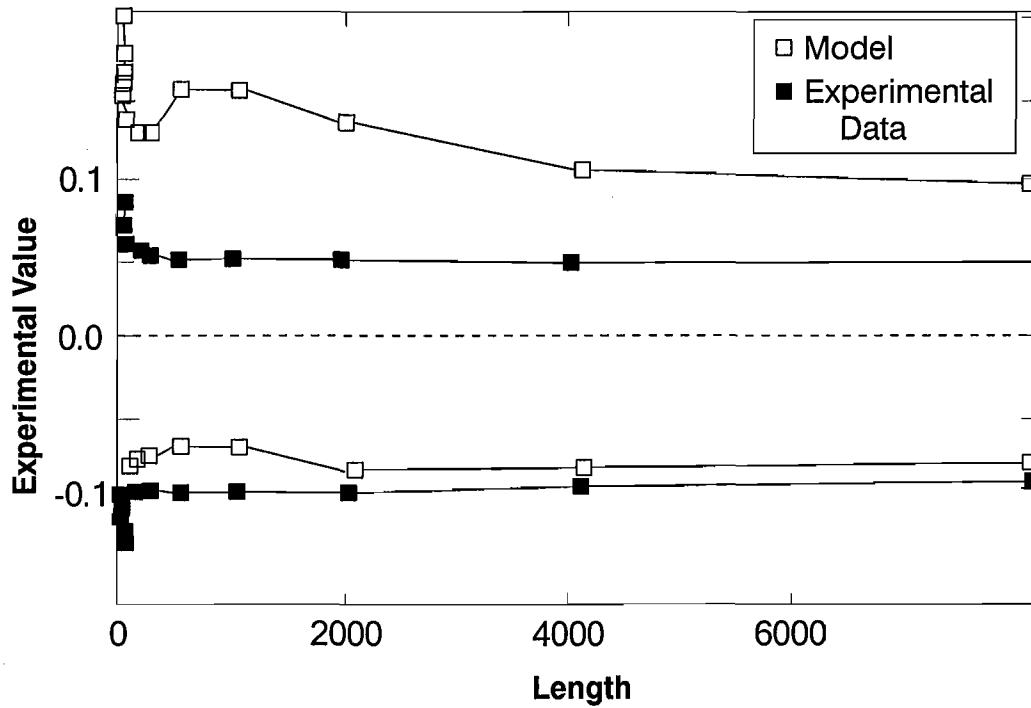
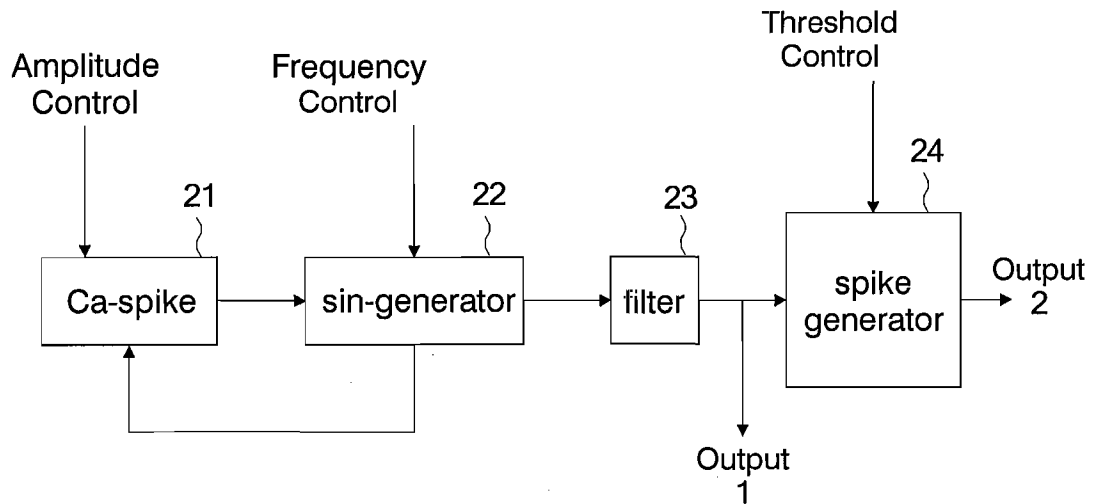


FIG. 9



Block-Diagram of the Circuit

FIG. 10

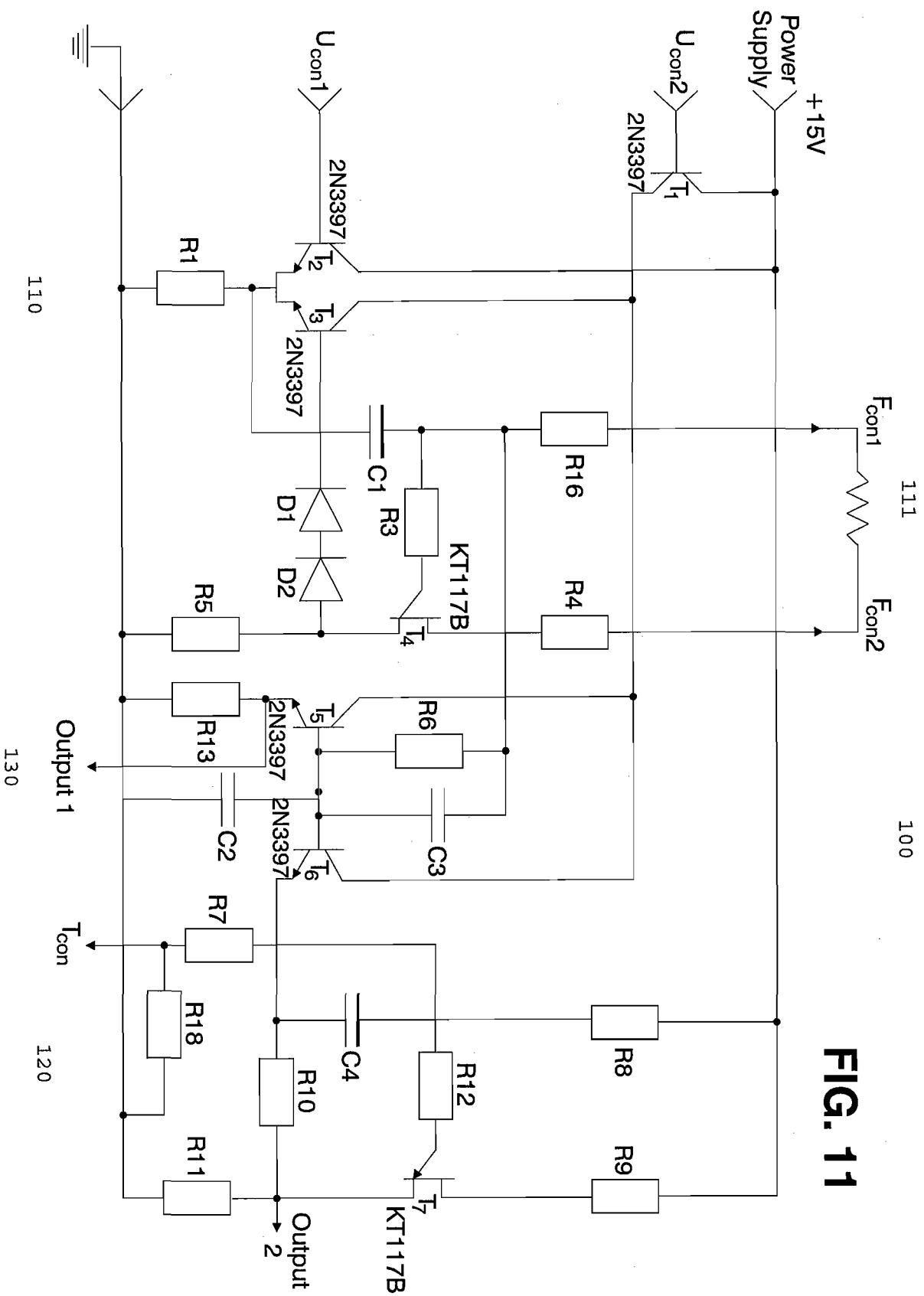


FIG. 11

12/33

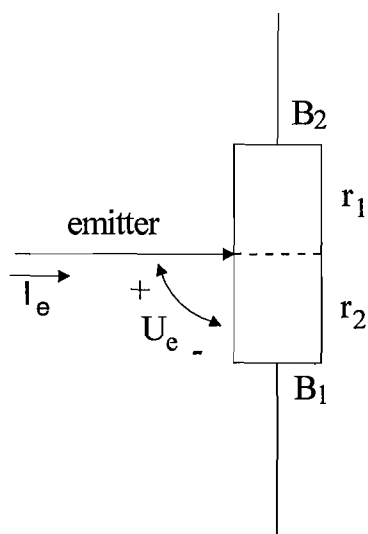


FIG. 12A

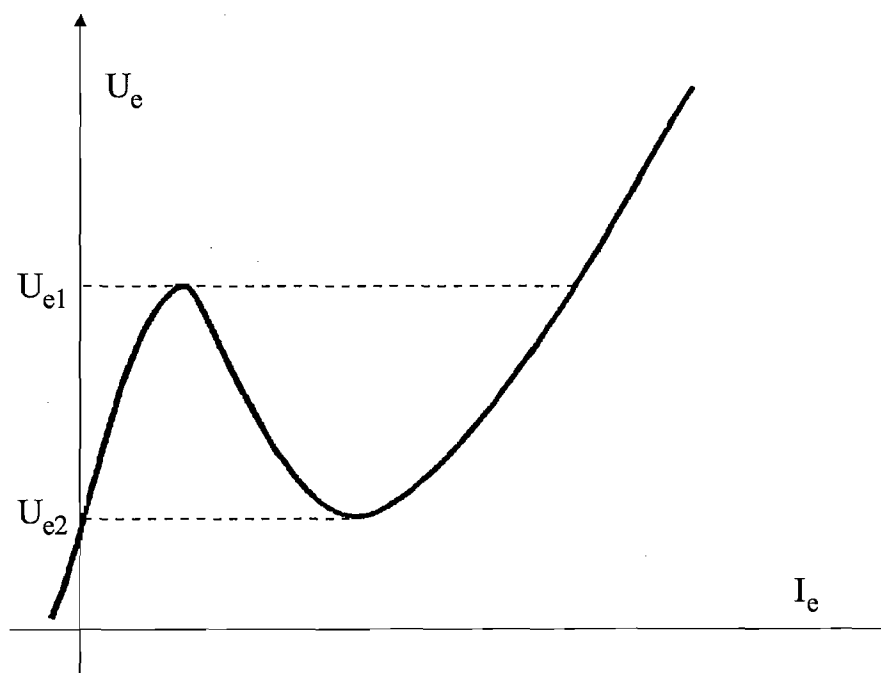
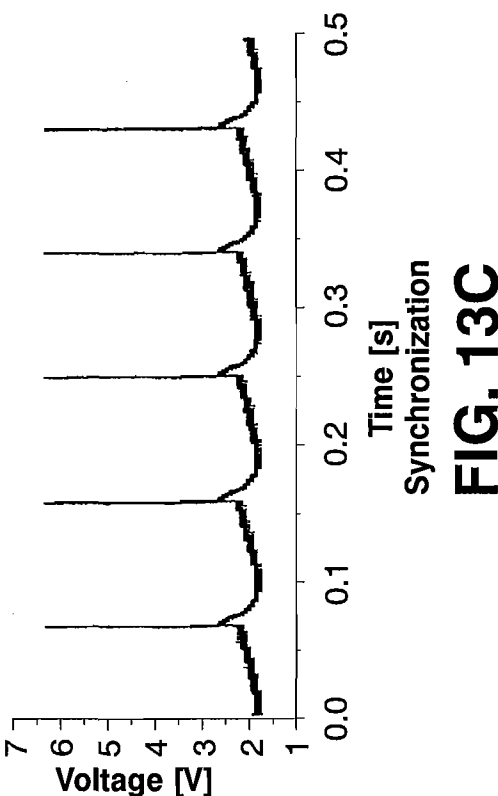
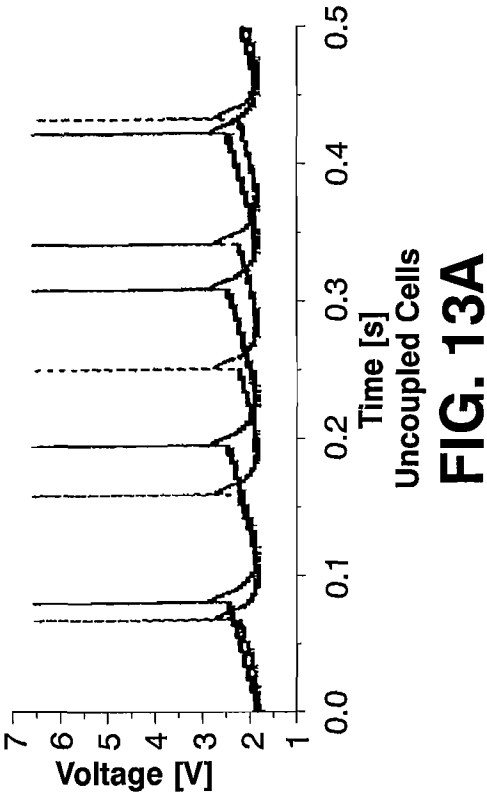
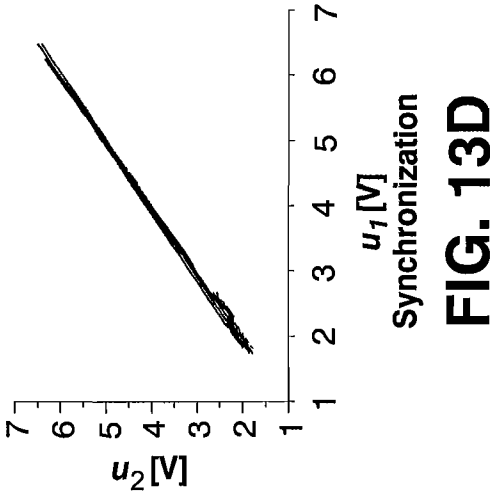
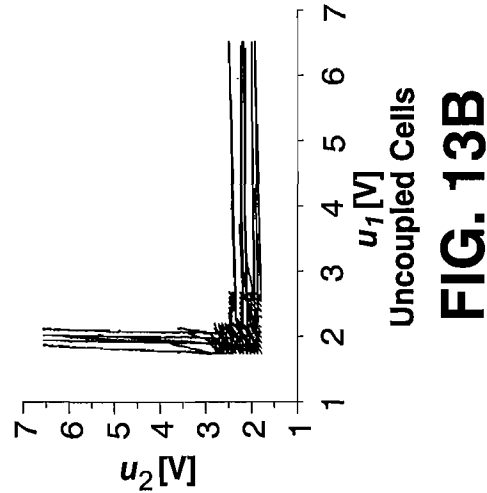
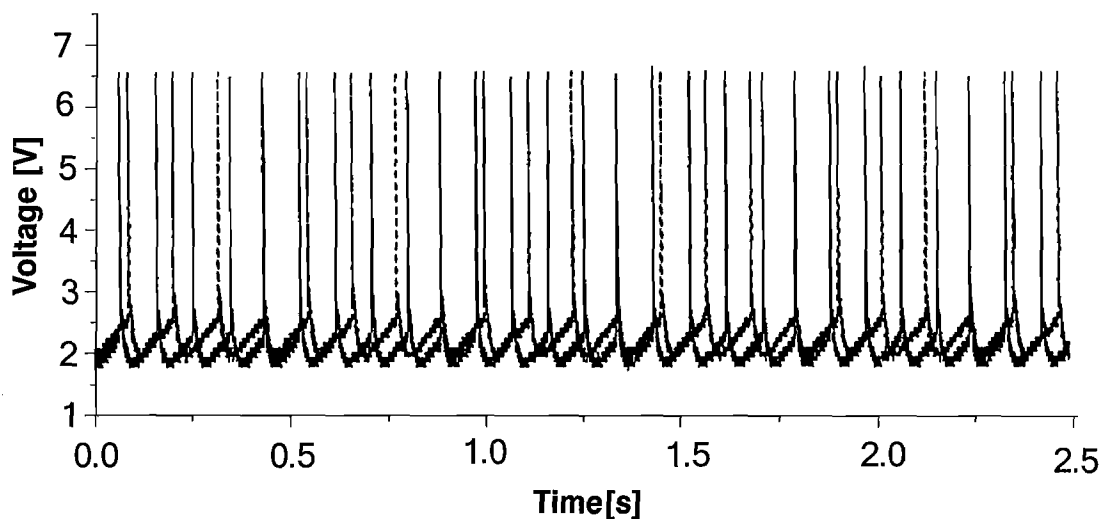


FIG. 12B

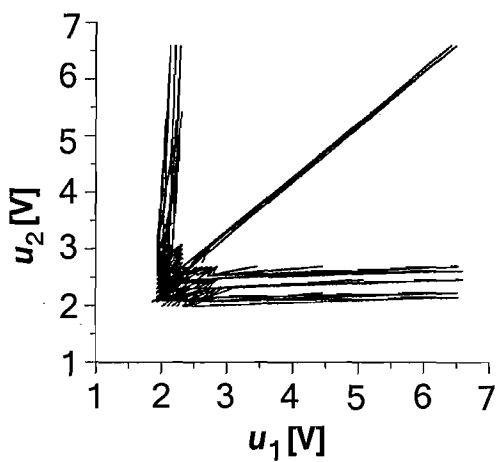


14/33



Synchronous and Asynchronous Spiking

FIG. 14A



Synchronous and
Asynchronous Spiking

FIG. 14B

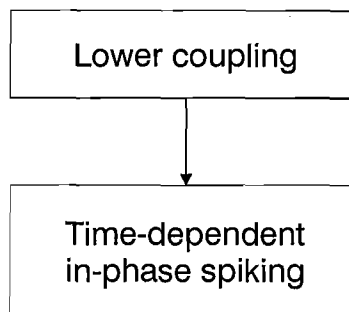


FIG. 14C

15/33

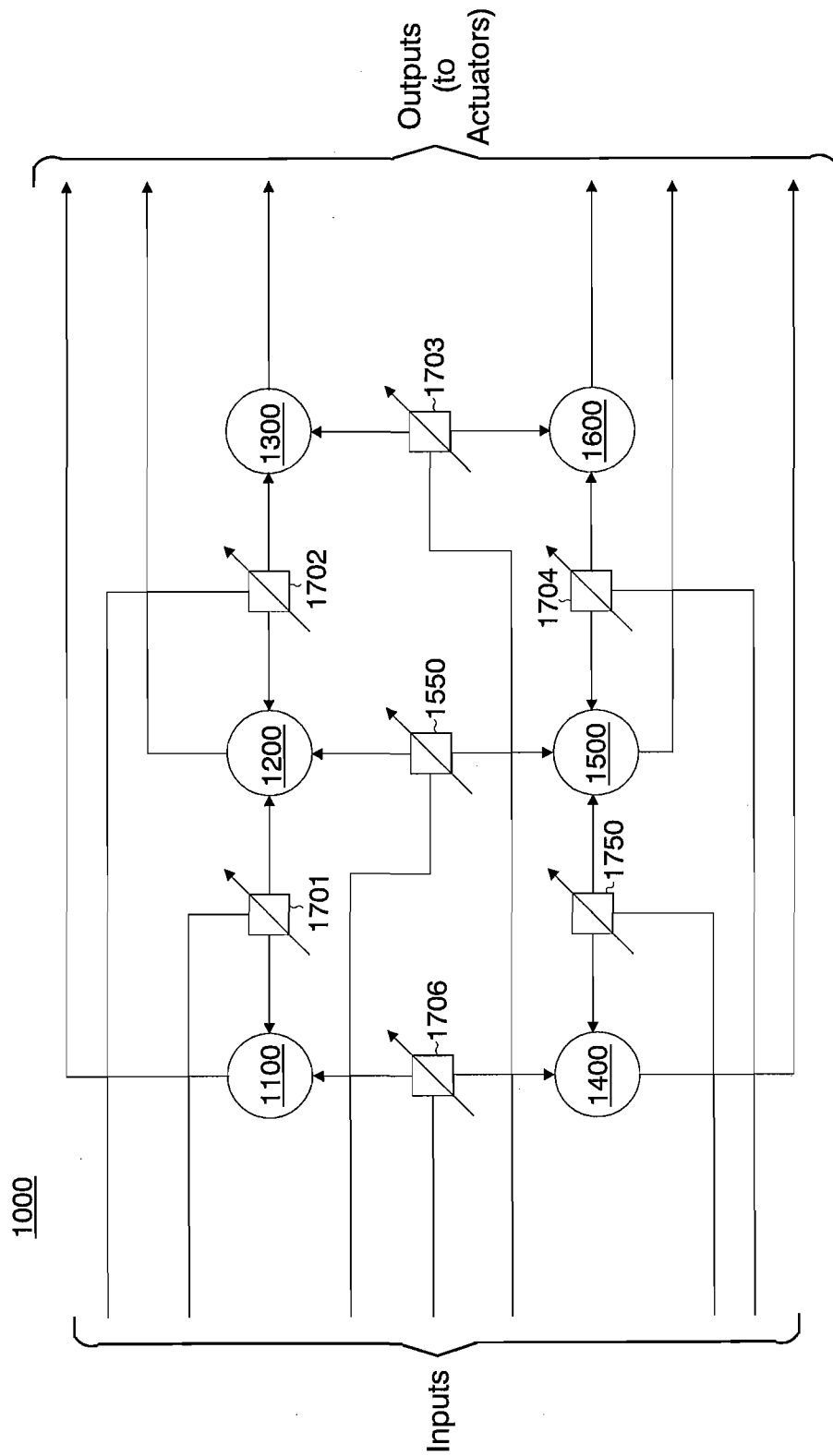


FIG. 15

16/33

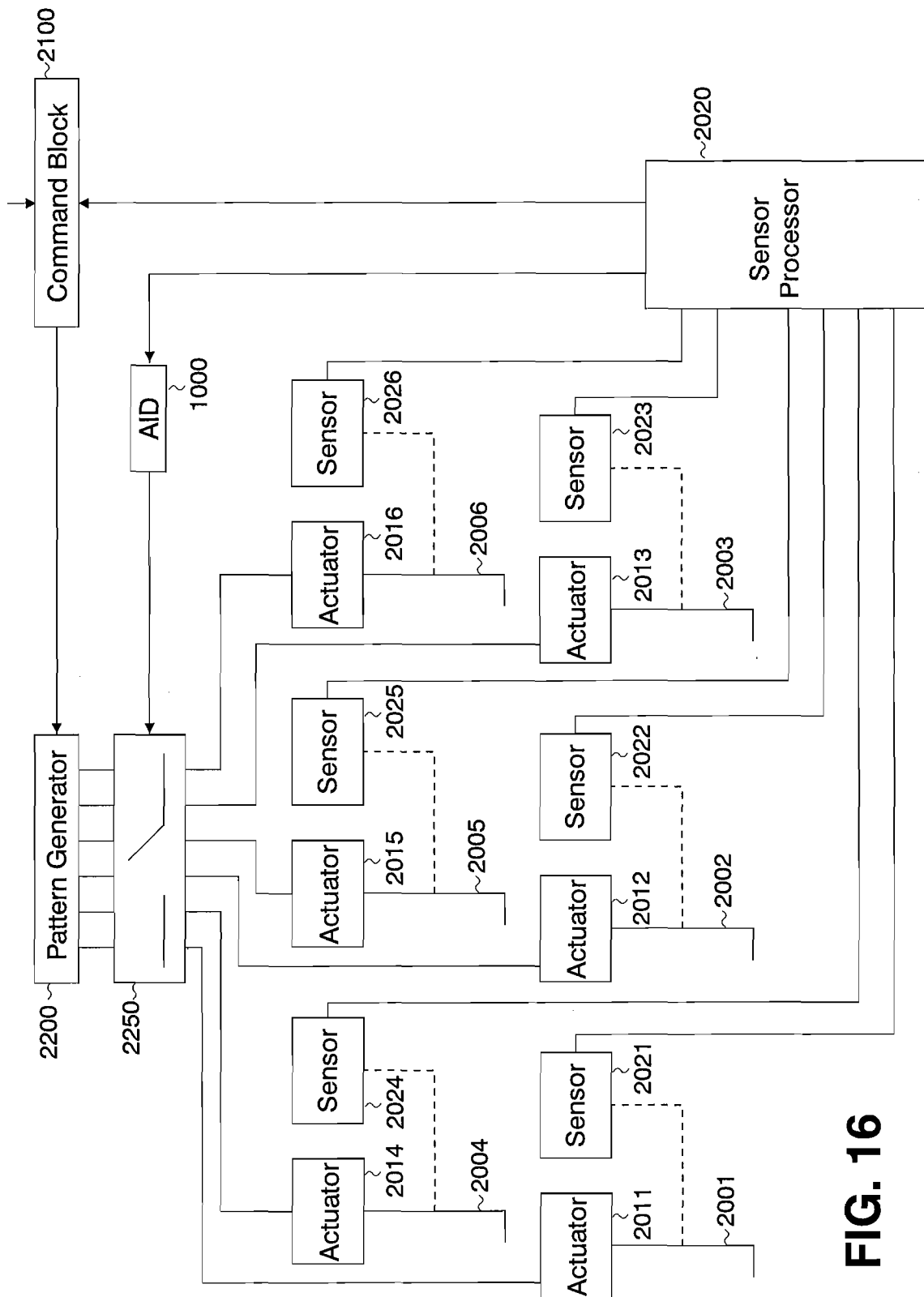


FIG. 16

17/33

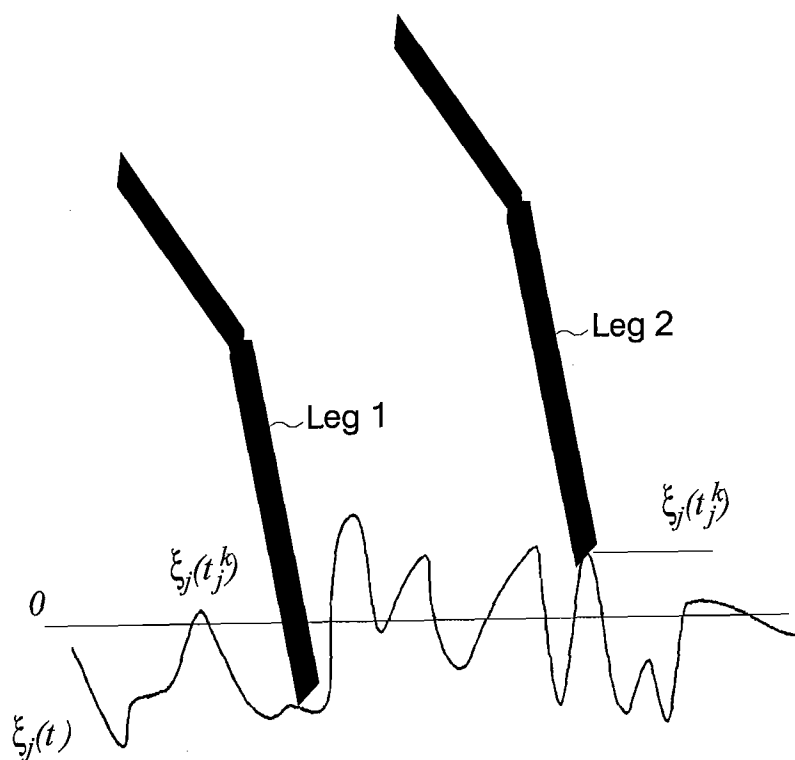


FIG. 17

18/33

FIG. 18A

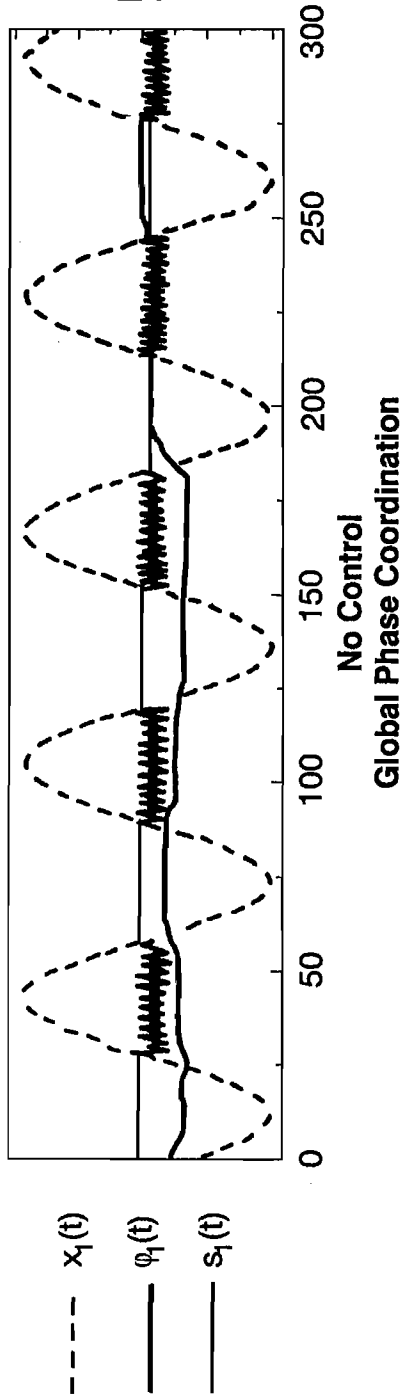


FIG. 18B

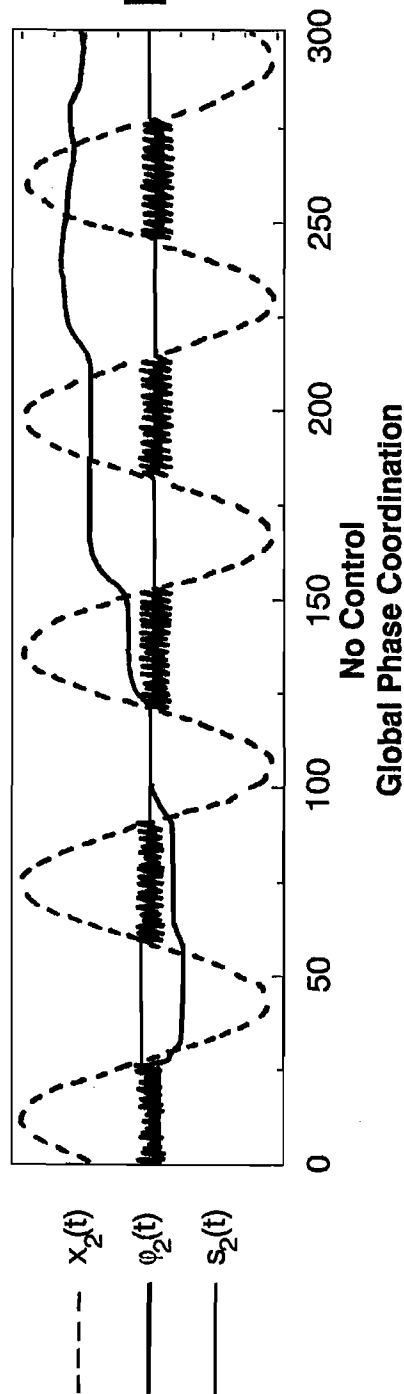
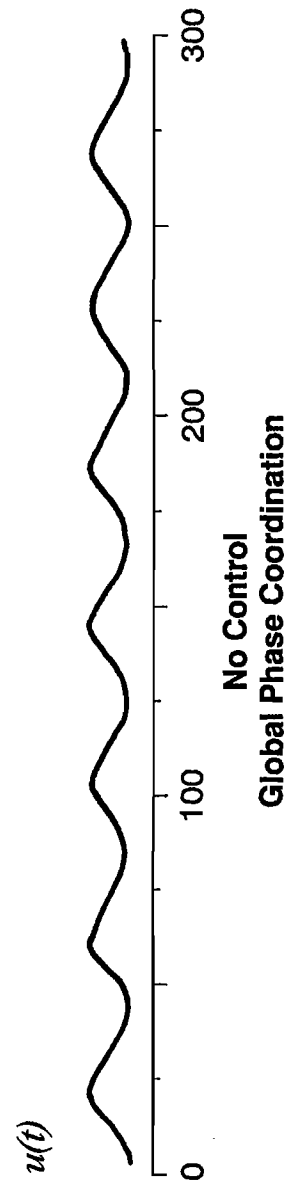
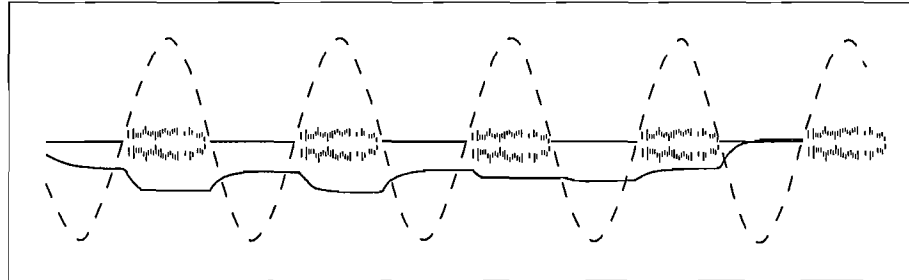


FIG. 18C

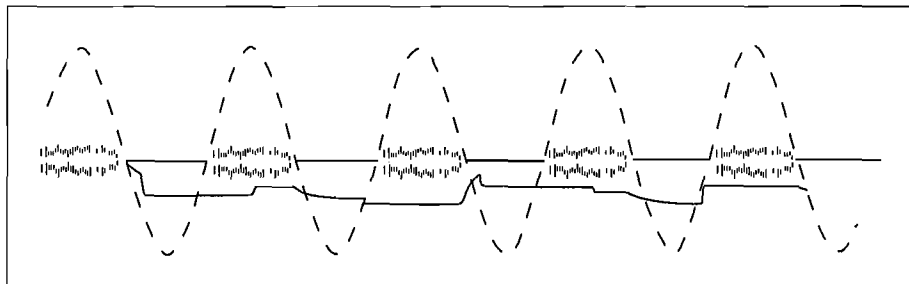


19/33

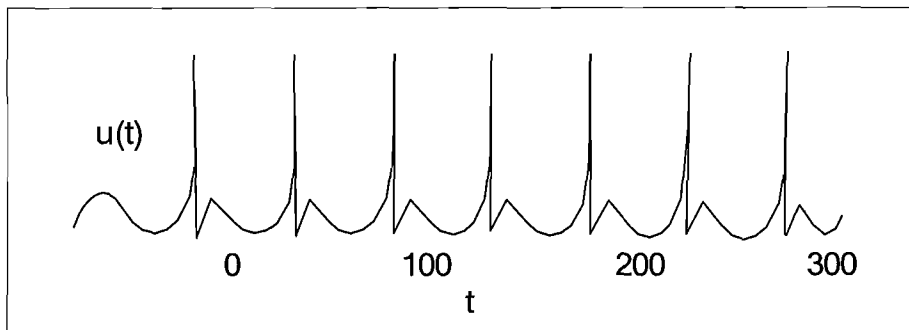
The control signal recovers
the correct phase shift relations



Coordination with Discrete Control
FIG. 19A



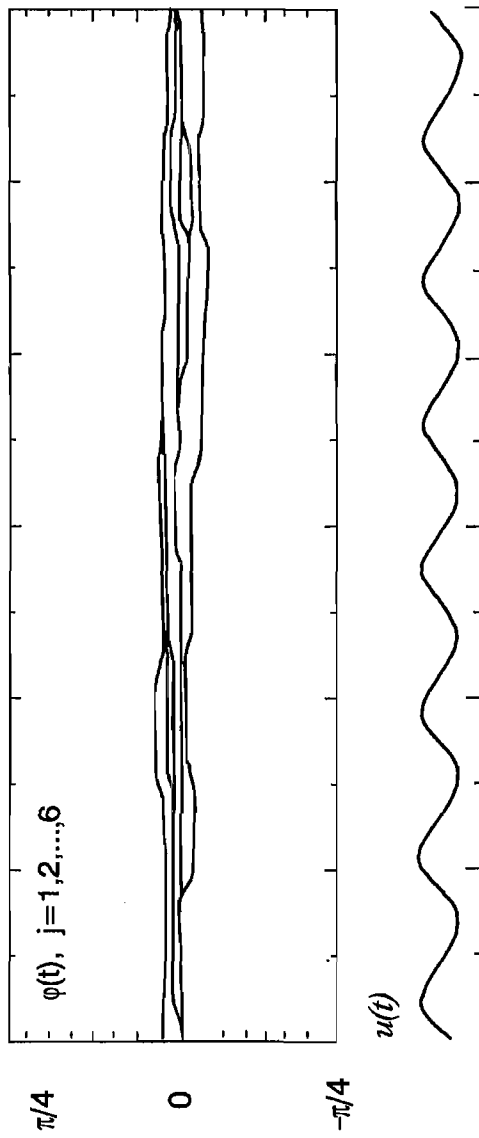
Coordination with Discrete Control
FIG. 19B



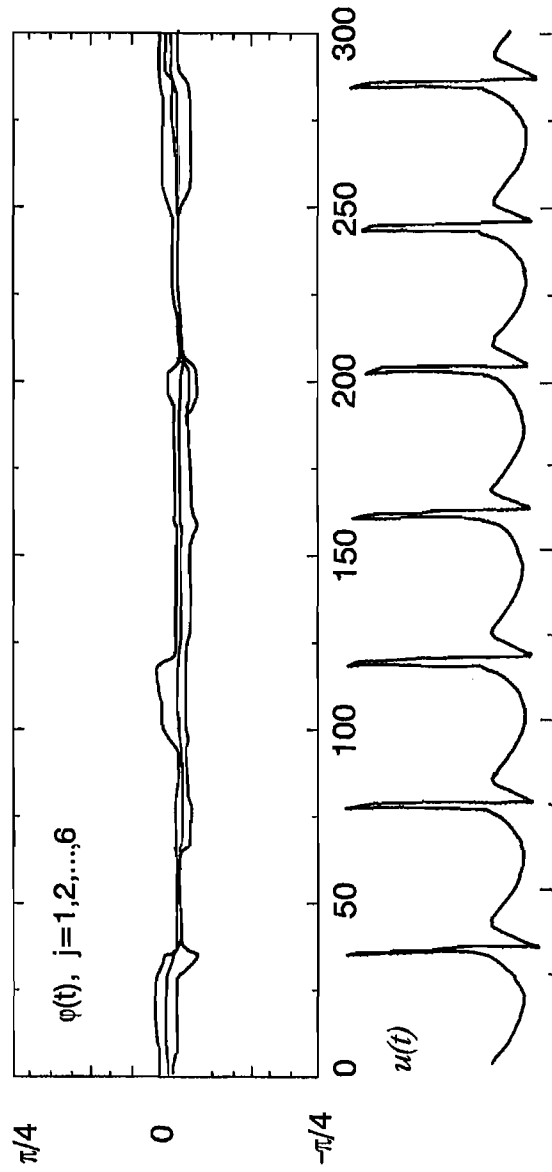
Coordination with Discrete Control
FIG. 19C

20/33

No Control
FIG. 20A



Discrete Control
FIG. 20B



21/33

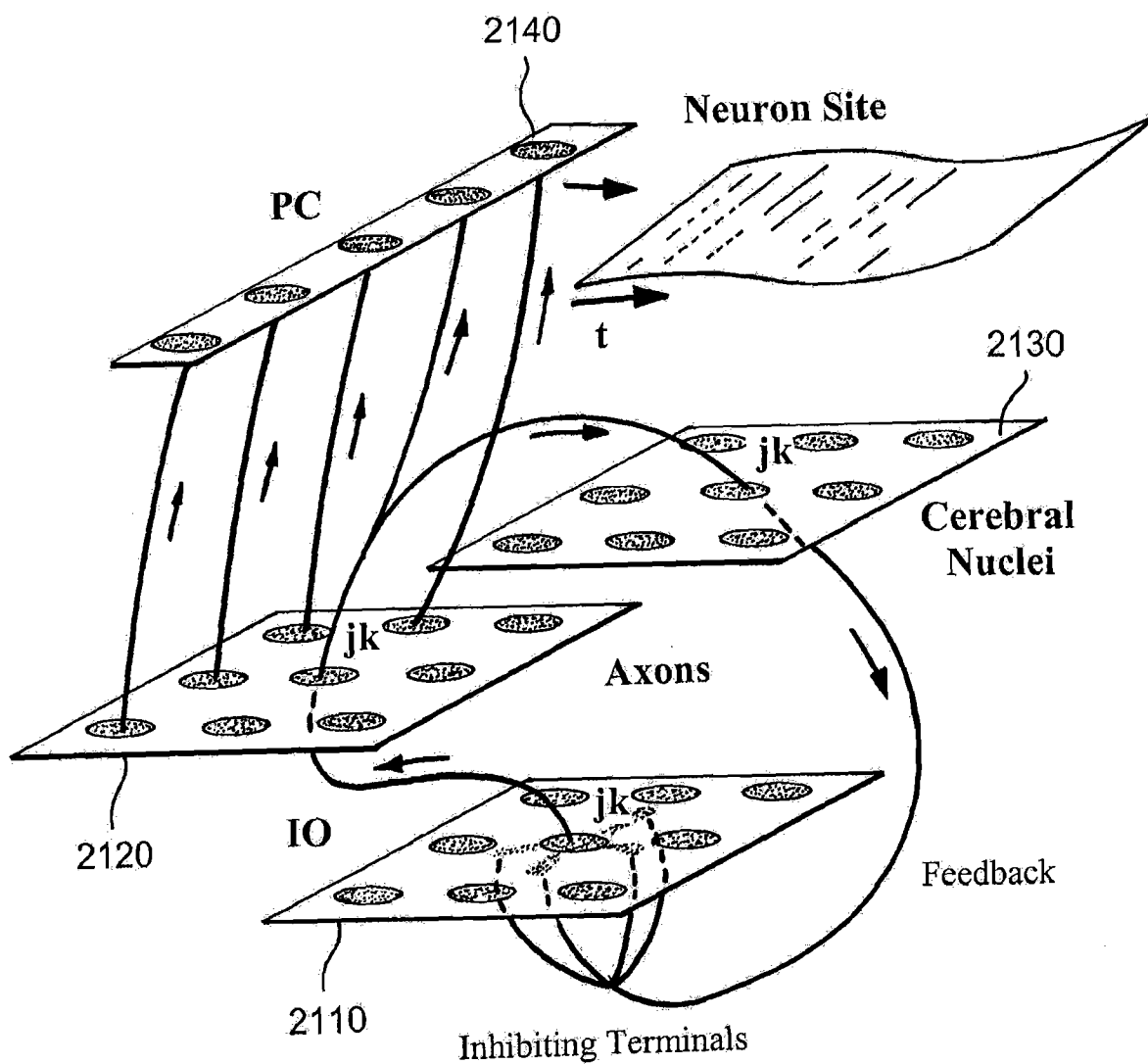


FIG. 21

22/33

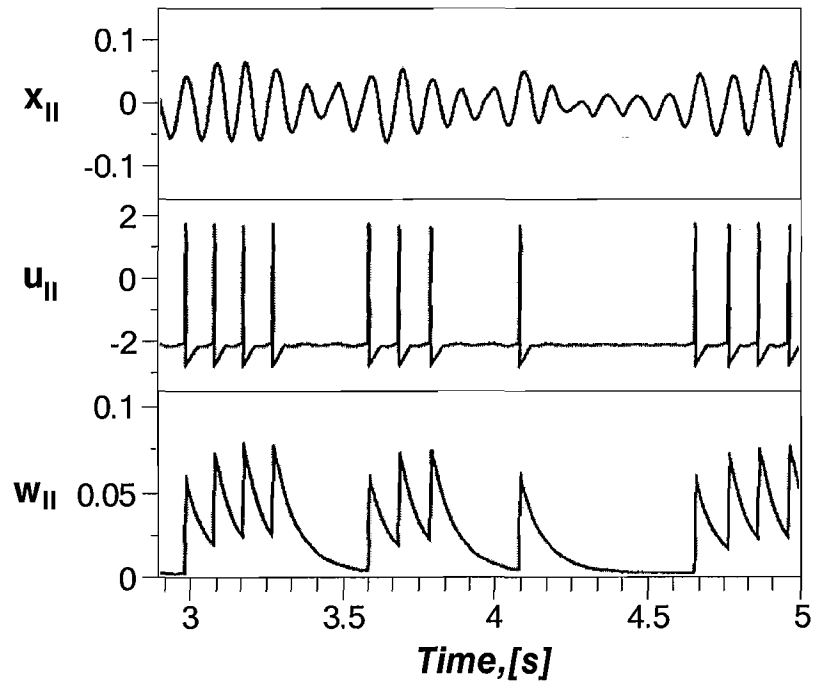


FIG. 22A

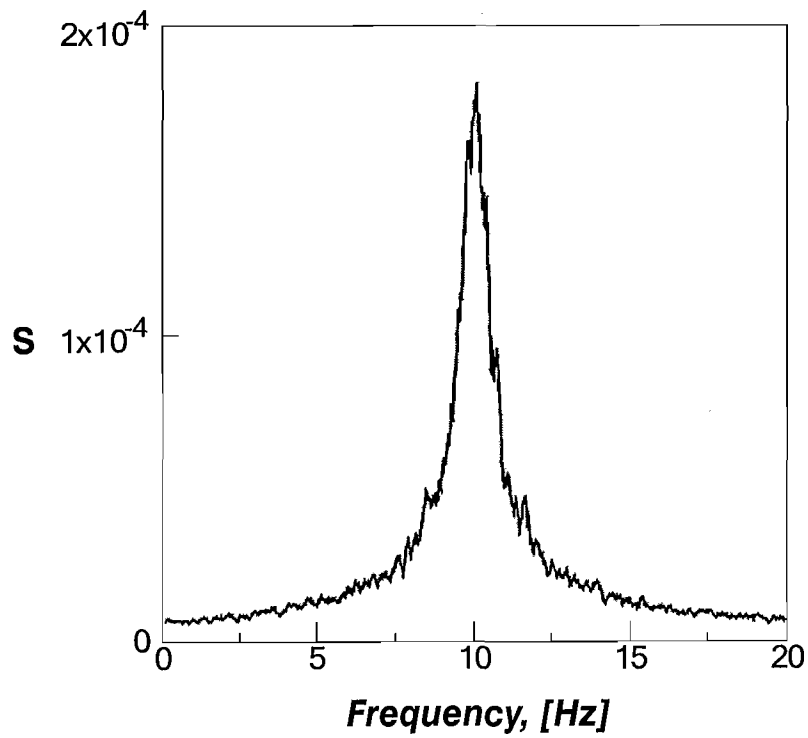


FIG. 22B

23/33

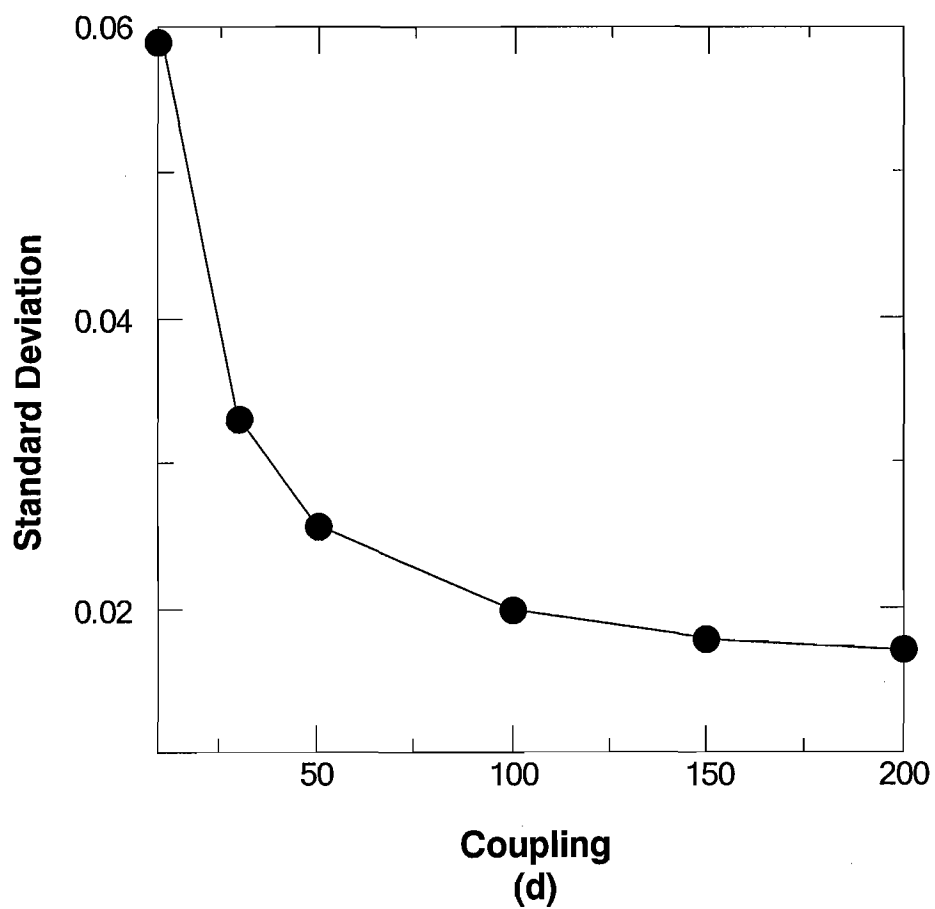


FIG. 23

24/33

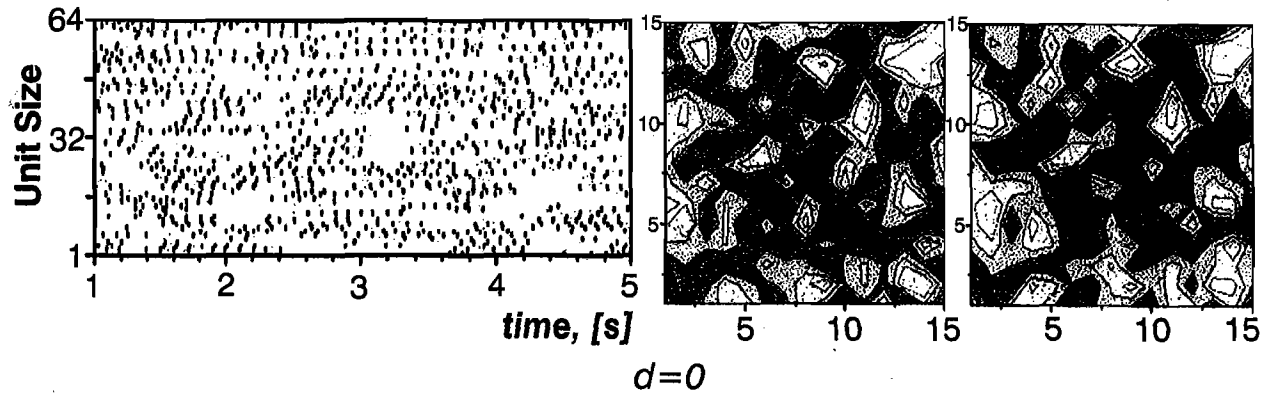


FIG. 24A

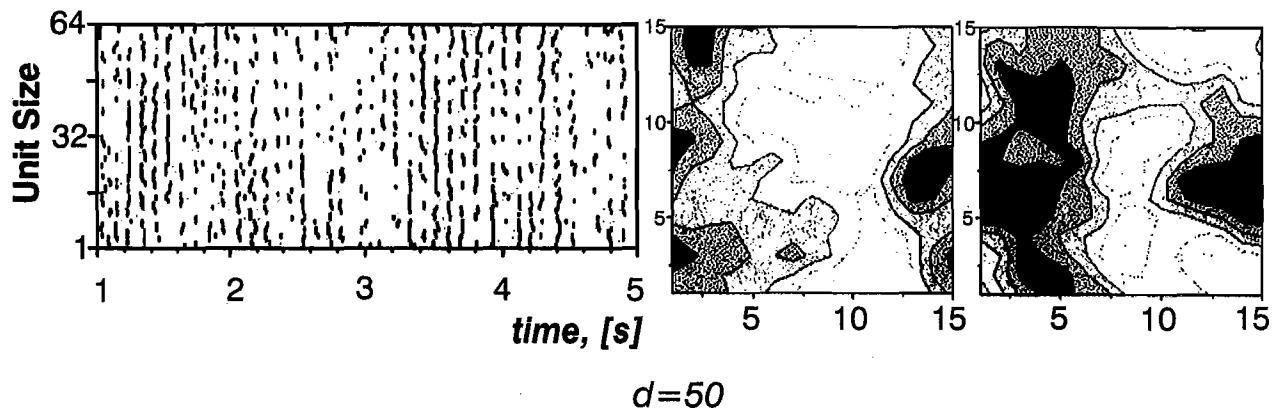


FIG. 24B

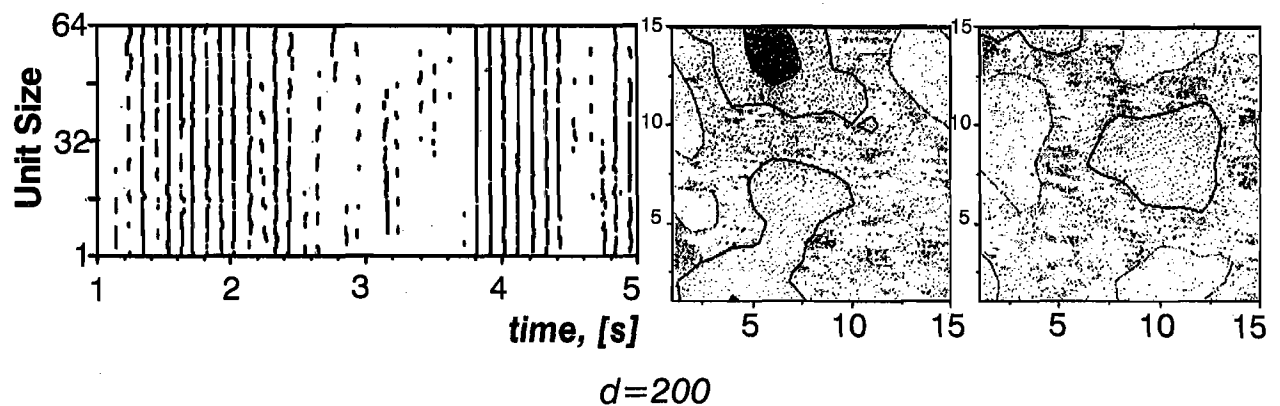


FIG. 24C

25/33

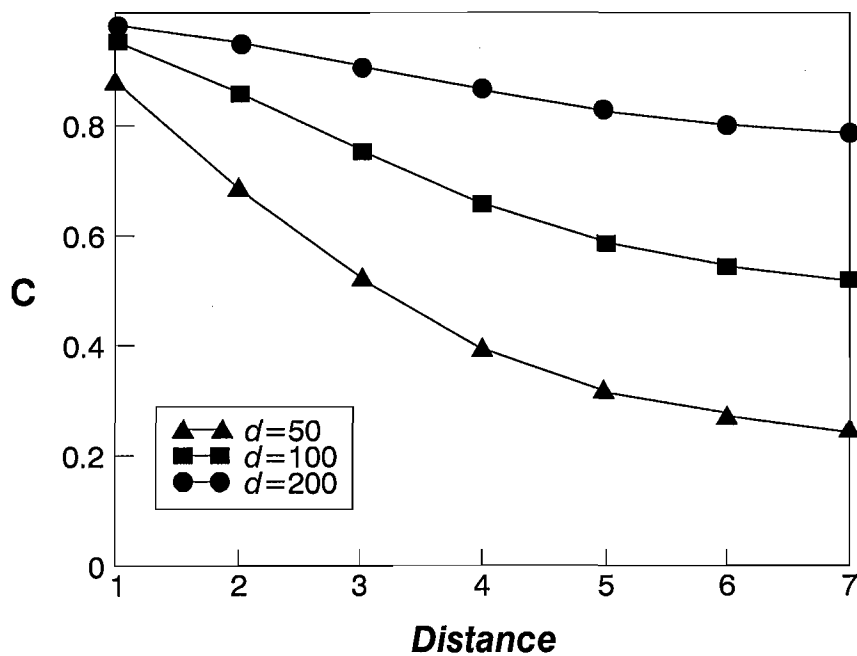


FIG. 25A

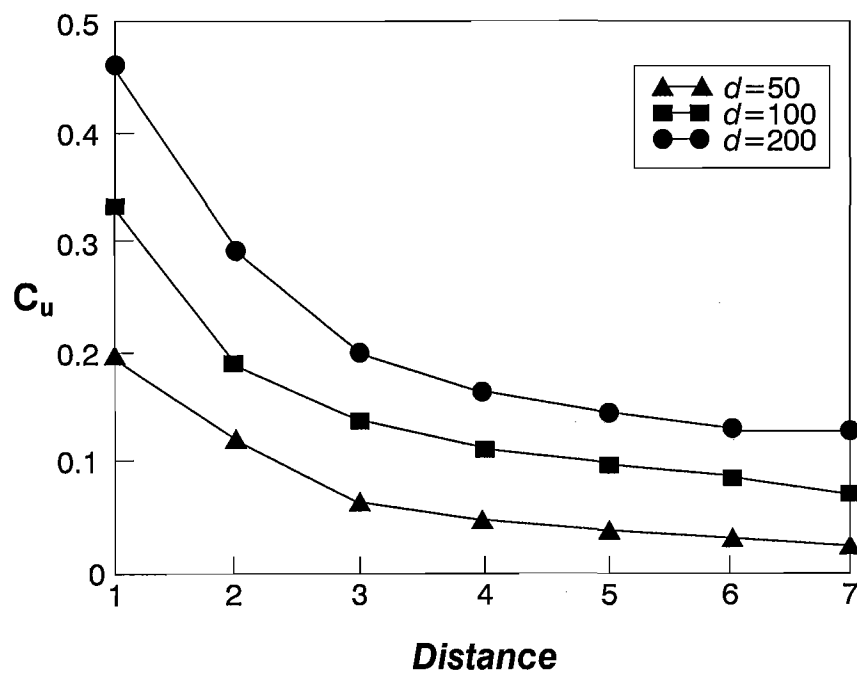


FIG. 25B

26/33

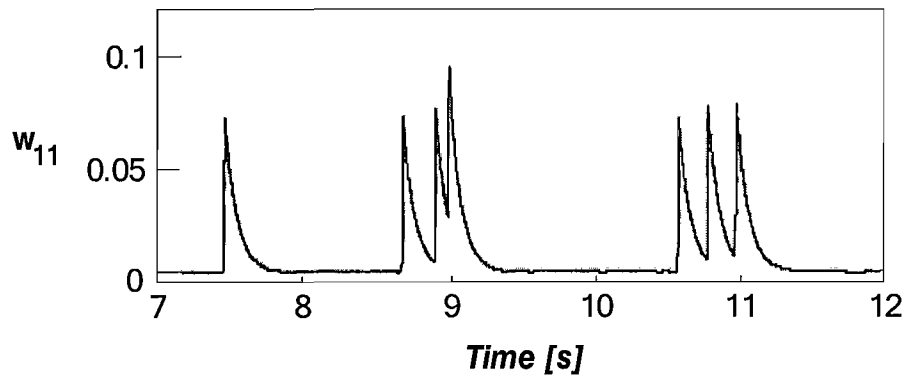


FIG. 26A

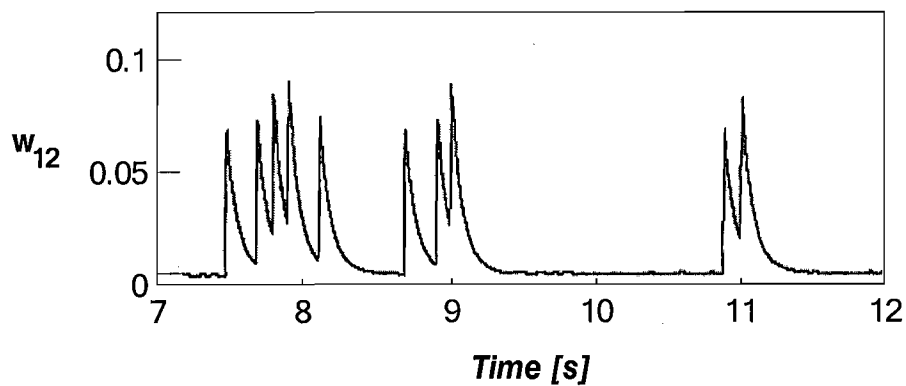


FIG. 26B

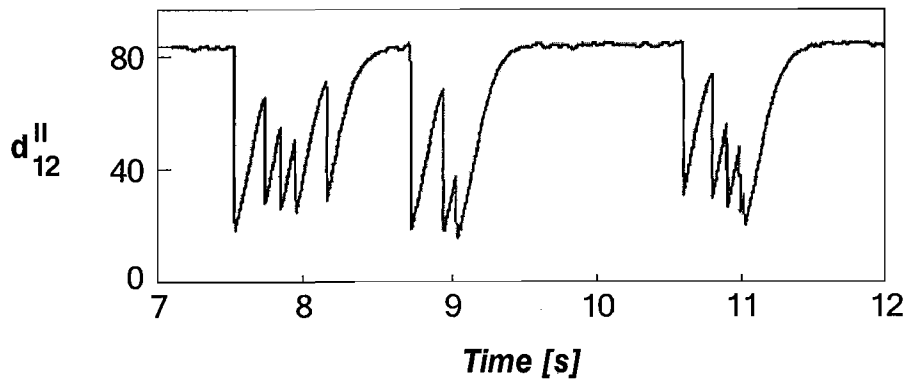


FIG. 26C

27/33

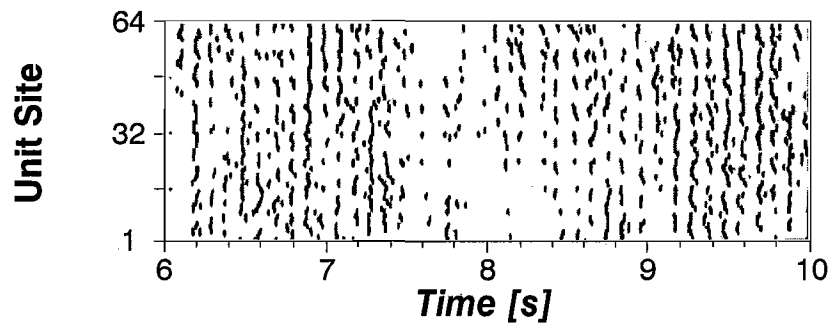


FIG. 27A

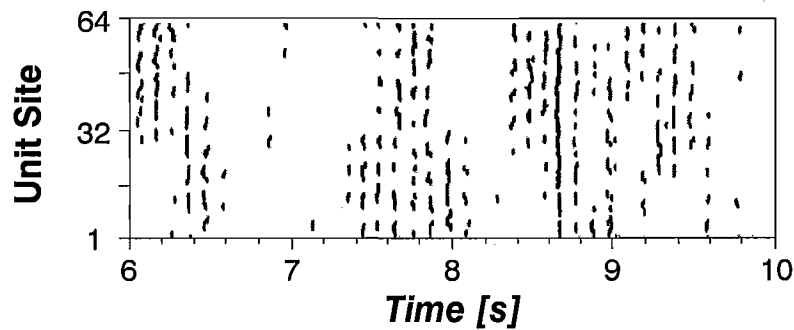


FIG. 27B

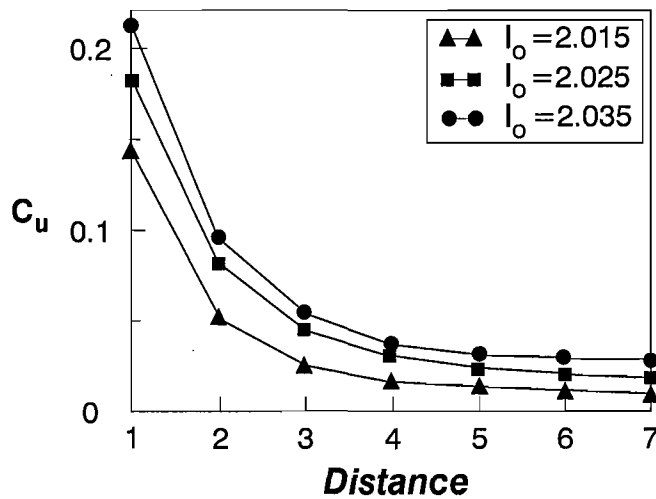
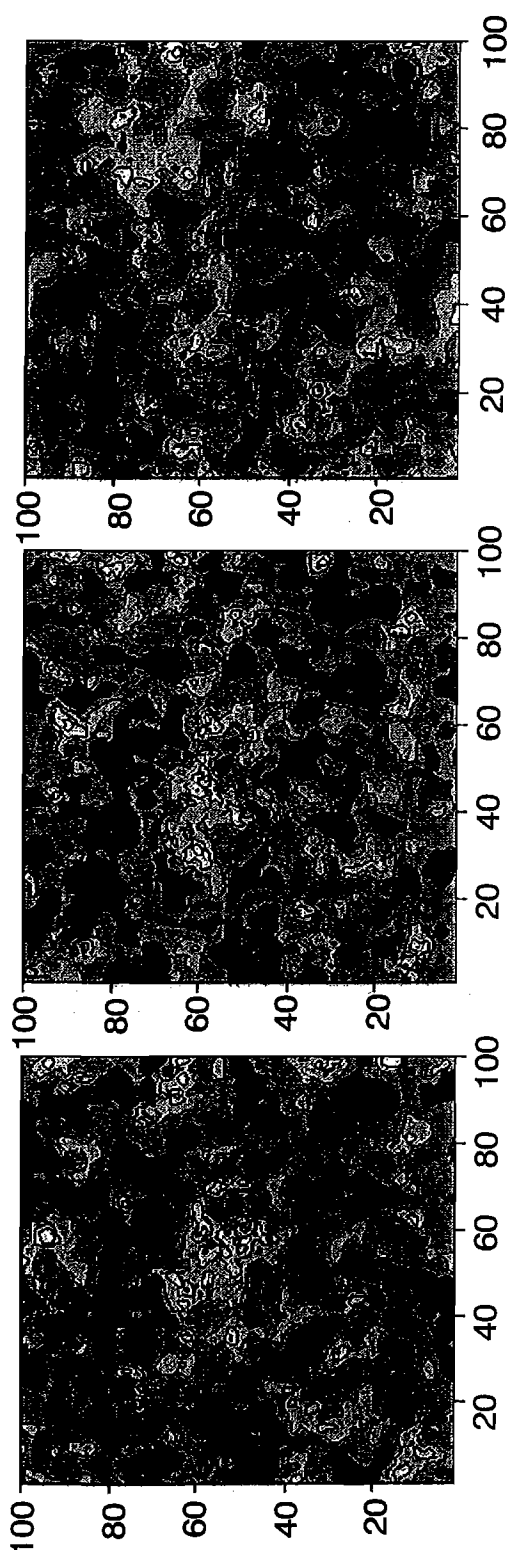
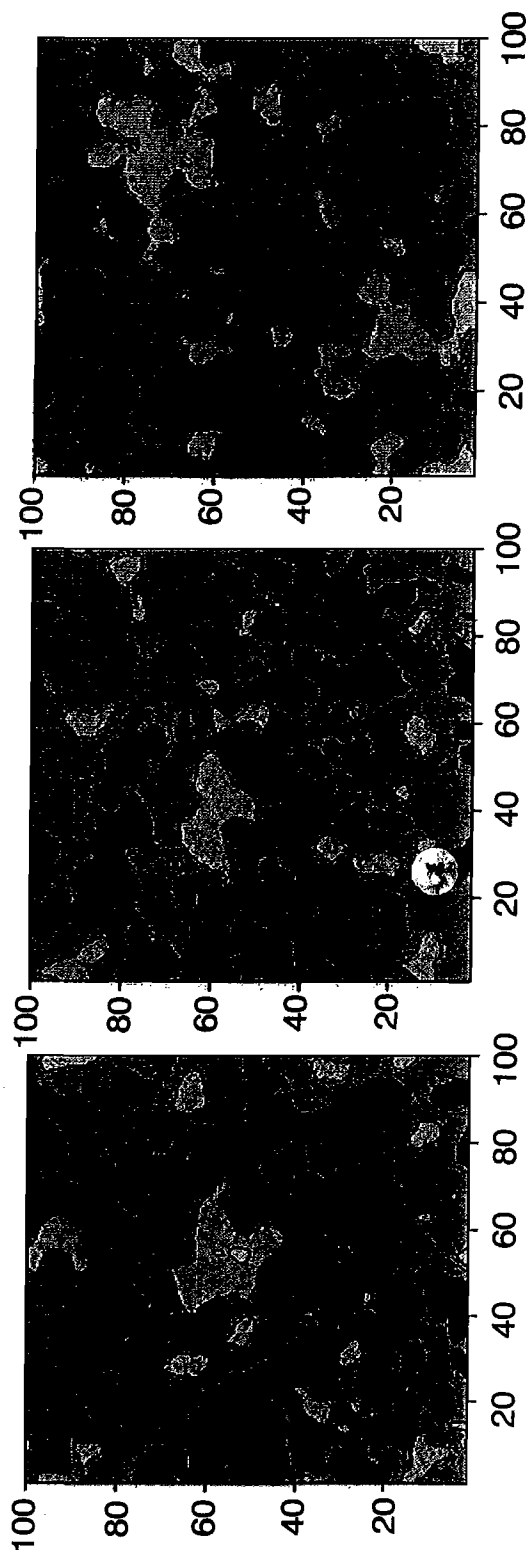


FIG. 27C

28/33



29/33

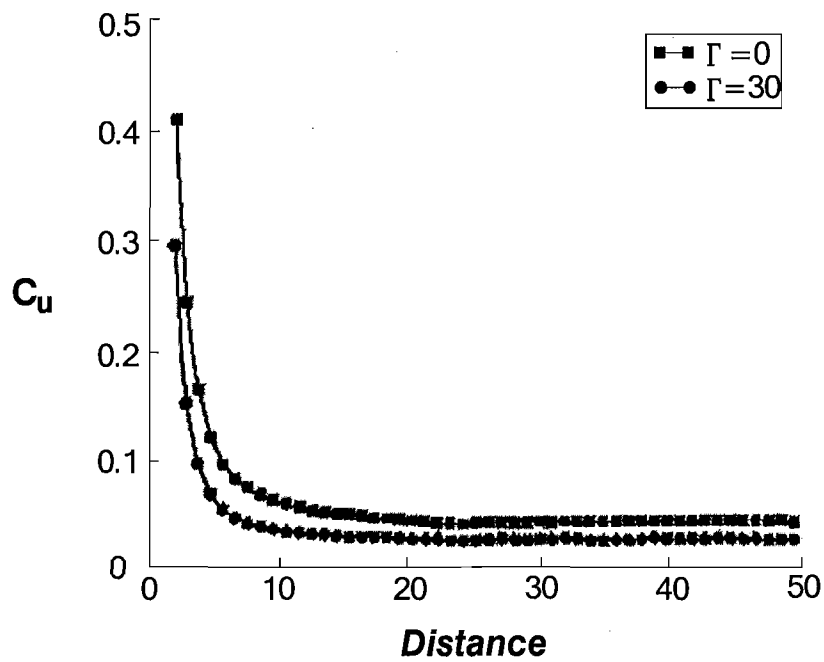


FIG. 29A

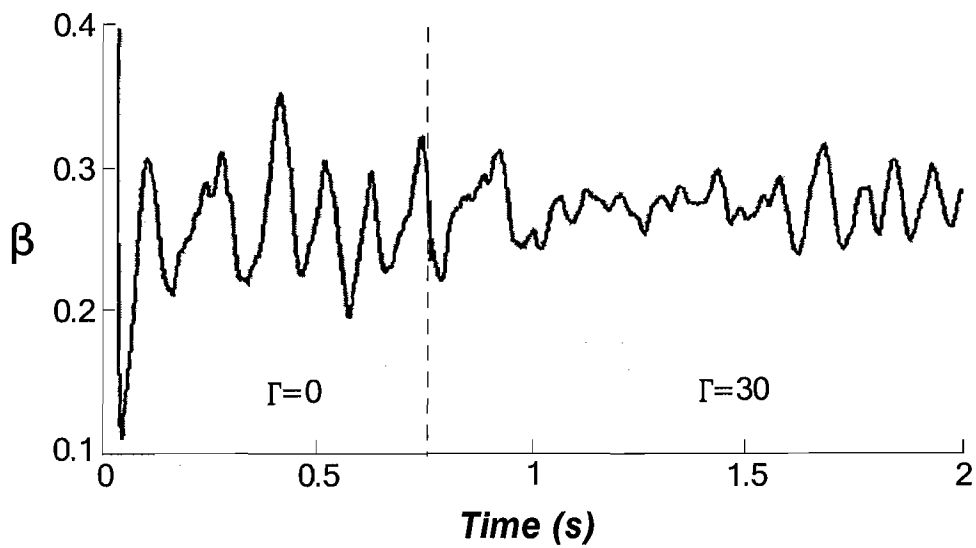


FIG. 29B

30/33

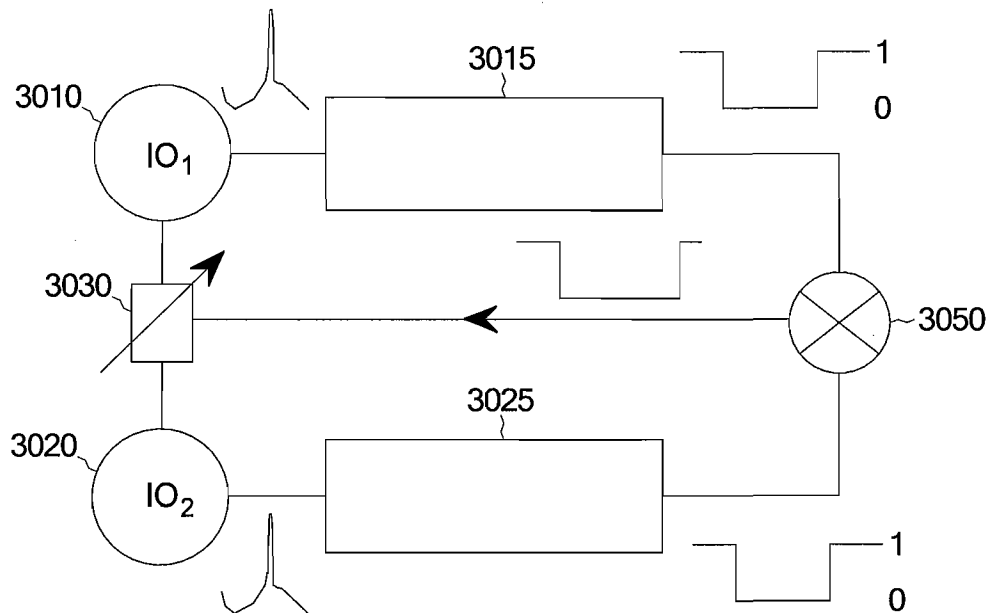


FIG. 30A

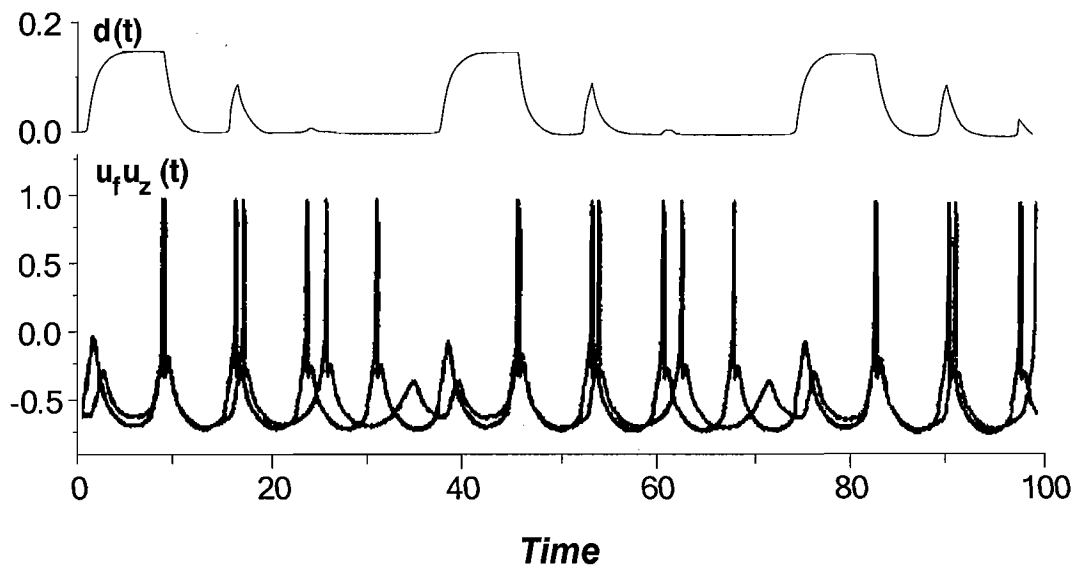
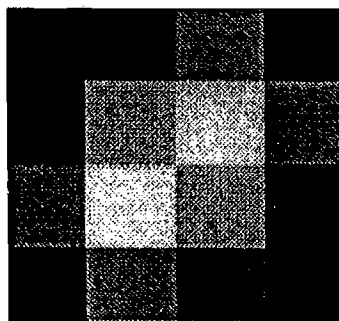
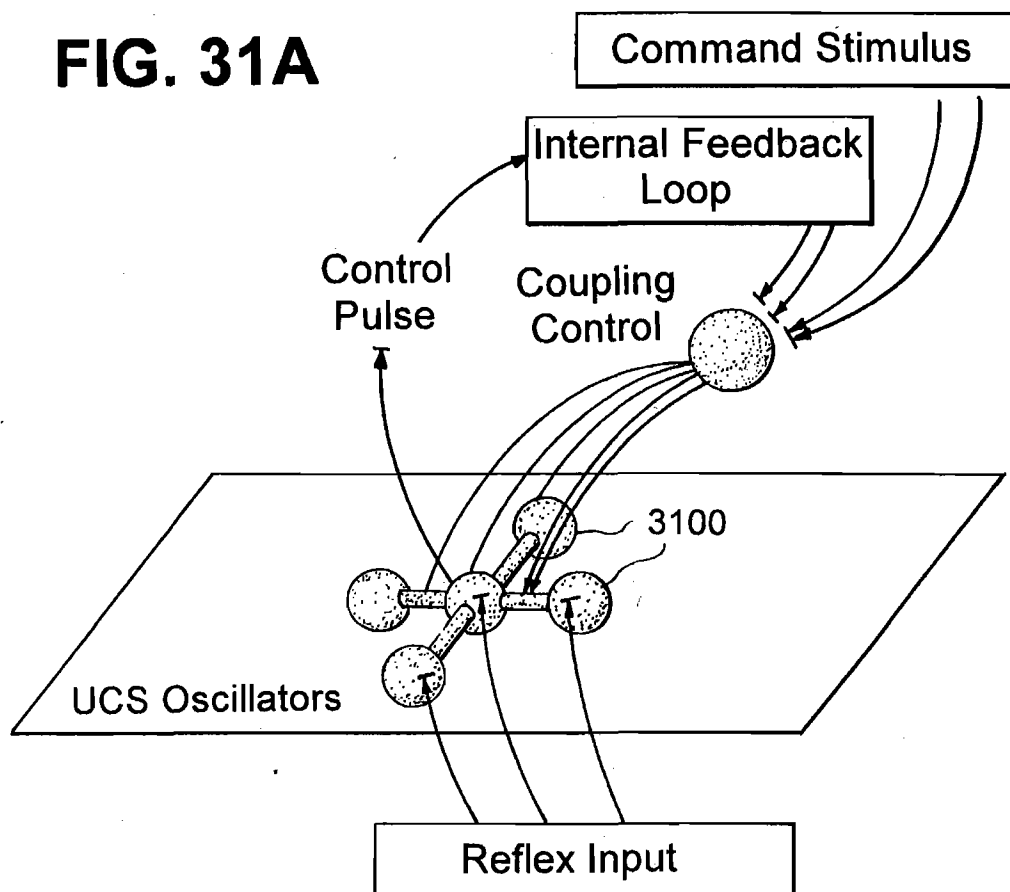


FIG. 30B

31/33

FIG. 31A**Motor Pattern****FIG. 31B**

32/33

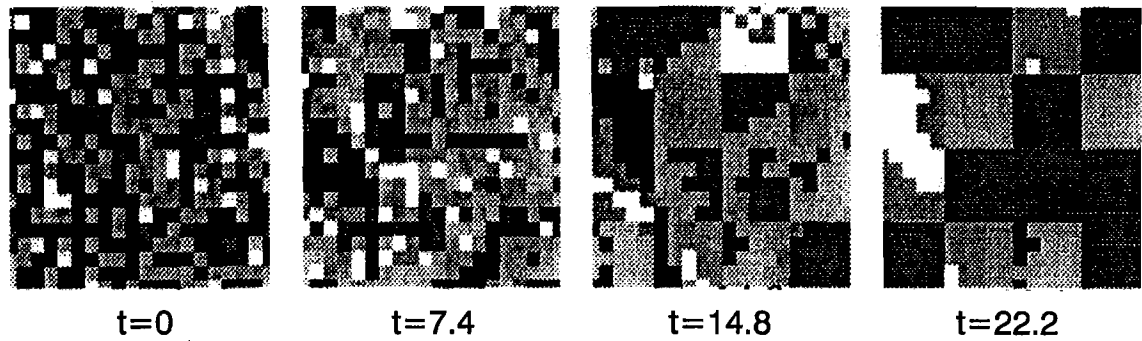


FIG. 32A

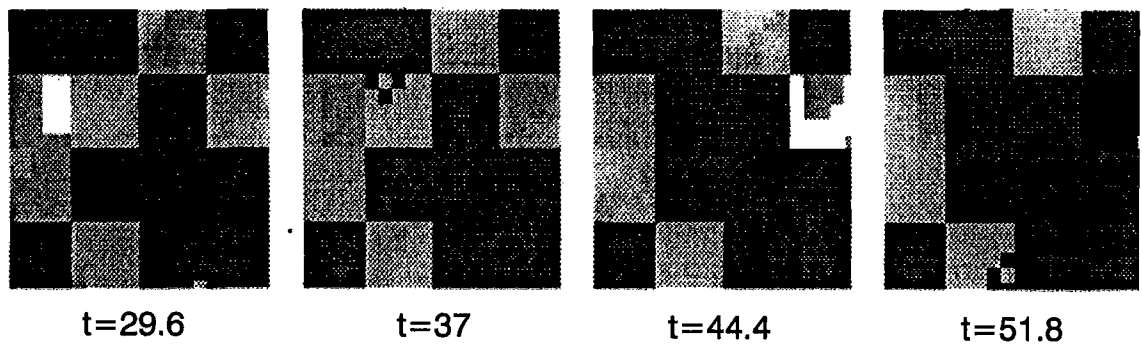


FIG. 32B

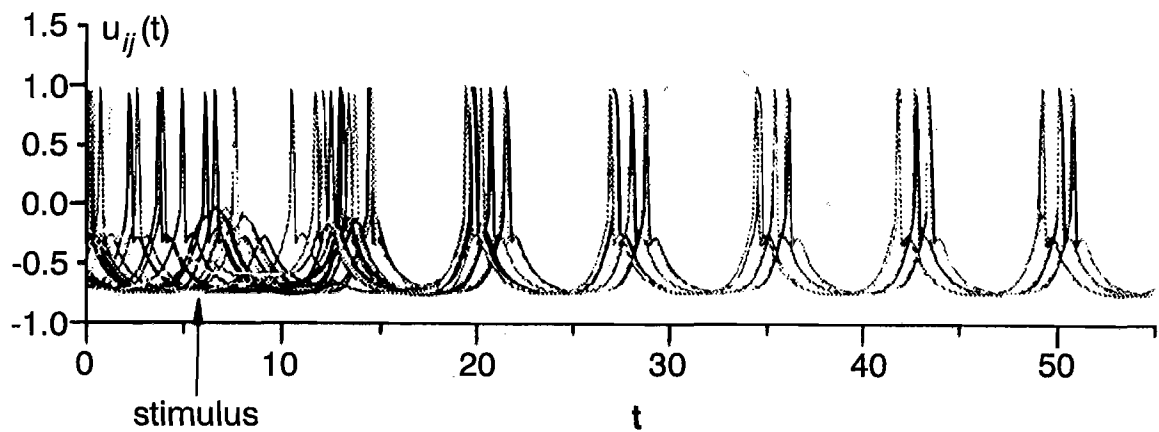
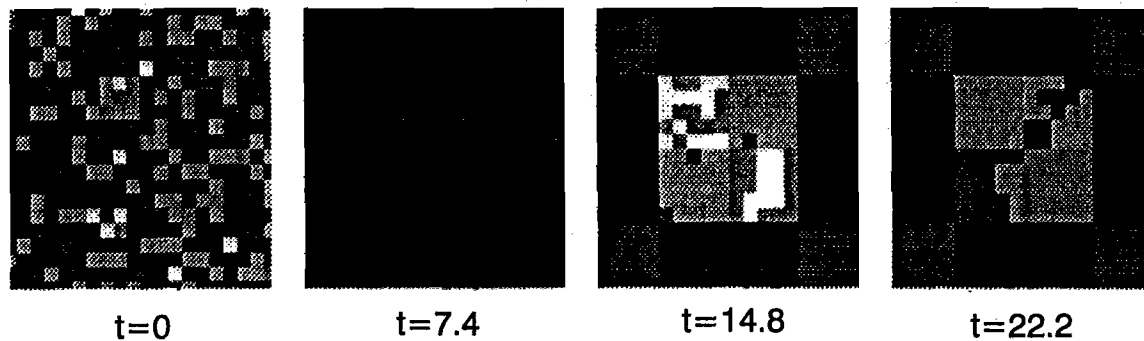
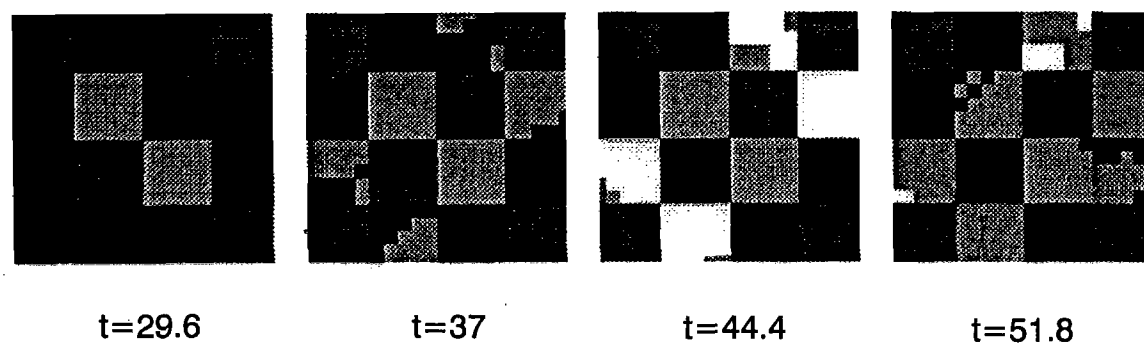
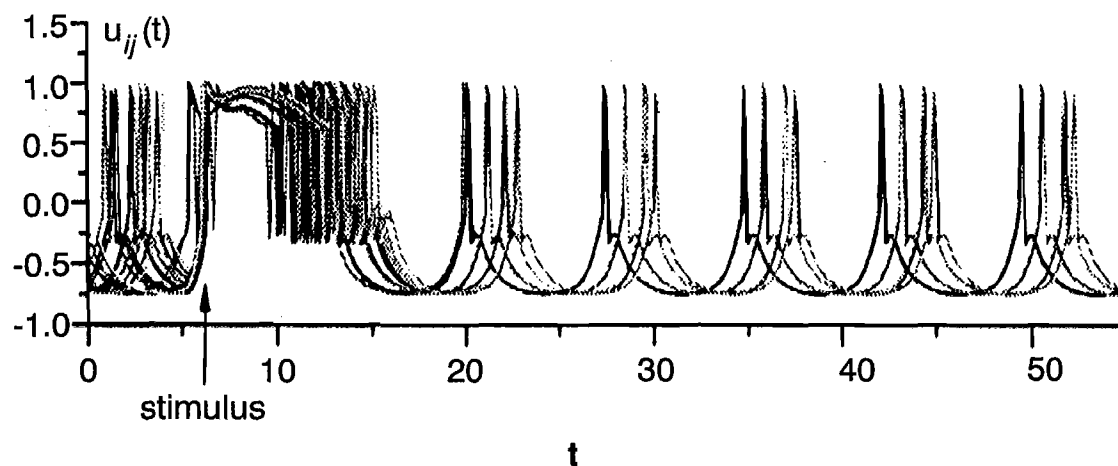


FIG. 32C

33/33

**FIG. 33A****FIG. 33B****FIG. 33C**